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Service Manual

PDP-425CMX

ORDER NO.
ARP3340

PLASMA DISPLAY

PDP-425CMX
PDP-42MXE10

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
PDP-425CMX	LUC5	AC100 - 120V	
PDP-42MXE10	LDFK5	AC100 - 240V	
PDP-42MXE10	YVXK5	AC100 - 240V	

For details, refer to "Important Check Points for good servicing".

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ⓒ**PIONEER CORPORATION 2006**

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SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

SAFETY PRECAUTIONS

NOTICE : Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis.

The following precautions should be observed :

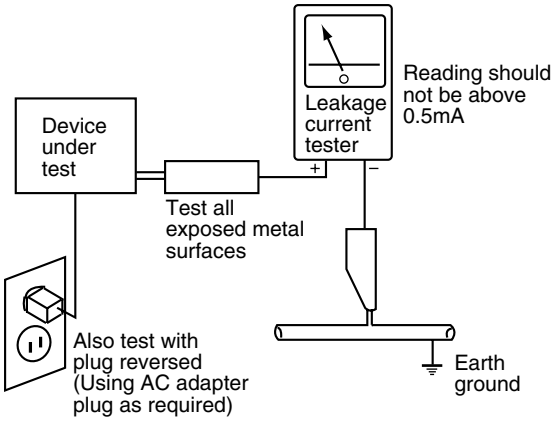
1. When service is required, even though the PDP UNIT an isolation transformer should be inserted between the power line and the set in safety before any service is performed.
2. When replacing a chassis in the set, all the protective devices must be put back in place, such as barriers, nonmetallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
3. When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
4. Always use the manufacture's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
5. Before returning a serviced set to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the set by the manufacture has become defective, or inadvertently defeated during servicing. Therefore, the following checks should be performed for the continued protection of the customer and servicetechnician.
6. Perform the following precautions against unwanted radiation and rise in internal temperature.
   - Always return the internal wiring to the original styling.
   - Attach parts (Gascket, Ferrite Core, Ground, Rear Cover, Shield Case etc.) surely after disassembly.
7. Perform the following precautions for the PDP panel.
   - When the front case is removed, make sure nothing hits the panel face, panel corner, and panel edge (so that the glass does not break).
   - Make sure that the panel vent does not break. (Check that the cover is attached.)
   - Handle the FPC connected to the panel carefully. Twisting or pulling the FPC when connecting it to the connector will cause it to peel off from the panel.
8. Pay attention to the following.
   - Pay extreme caution when the front case and rear panel are removed because this may cause a high risk of disturbance to TVs and radios in the surrounding.

Leakage Current Cold Check

With the AC plug removed from an AC power source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (input/output terminals, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of 0.3MΩ and a maximum resistor reading of 5MΩ. Any resistor value below or above this range indicates an abnormality which requires corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into an AC power source (do not use an isolation transformer for this check).
Turn the AC power switch on.
Using a "Leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (input/output terminals, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
+
–
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE SET TO THE CUSTOMER.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in PIONEER set have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire or other hazards.
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

■Charged Section

The places where the commercial AC power is used without passing through the power supply transformer.
If the places are touched, there is a risk of electric shock. In addition, the measuring equipment can be damaged if it is connected to the GND of the charged section and the GND of the non-charged section while connecting the set directly to the commercial AC power supply. Therefore, be sure to connect the set via an insulated transformer and supply the current.

1. Power Cord
2. AC Inlet
3. Power Switch (S1)
4. Fuse (In the POWER SUPPLY Unit)
5. STB Transformer and Converter Transformer (In the POWER SUPPLY Unit)
6. Other primary side of the POWER SUPPLY Unit

■High Voltage Generating Point

The places where voltage is 100V or more except for the charged places described above. If the places are touched, there is a risk of electric shock.

If the procedures described in "7.1.4 POWER ON/OFF FUNCTION FOR THE LARGE POWER SIGNAL SYSTEM" are performed before the power is turned off, the voltage will be discharged in about 30 seconds.

1. POWER SUPPLY Unit.....(205V)
2. 42 X DRIVE Assy ..... (–180V to 205V)
3. 42 Y DRIVE Assy ..... (500V)
4. 42 SCAN A Assy ..... (500V)
5. 42 SCAN B Assy ..... (500V)
6. SUS CLAMP 1 Assy .....(–180V to 205V)
7. SUS CLAMP 2 Assy .....(–180V to 205V)

: Part is Charged Section.
: Part is the High Voltage Generating Points other than the Charged Section.

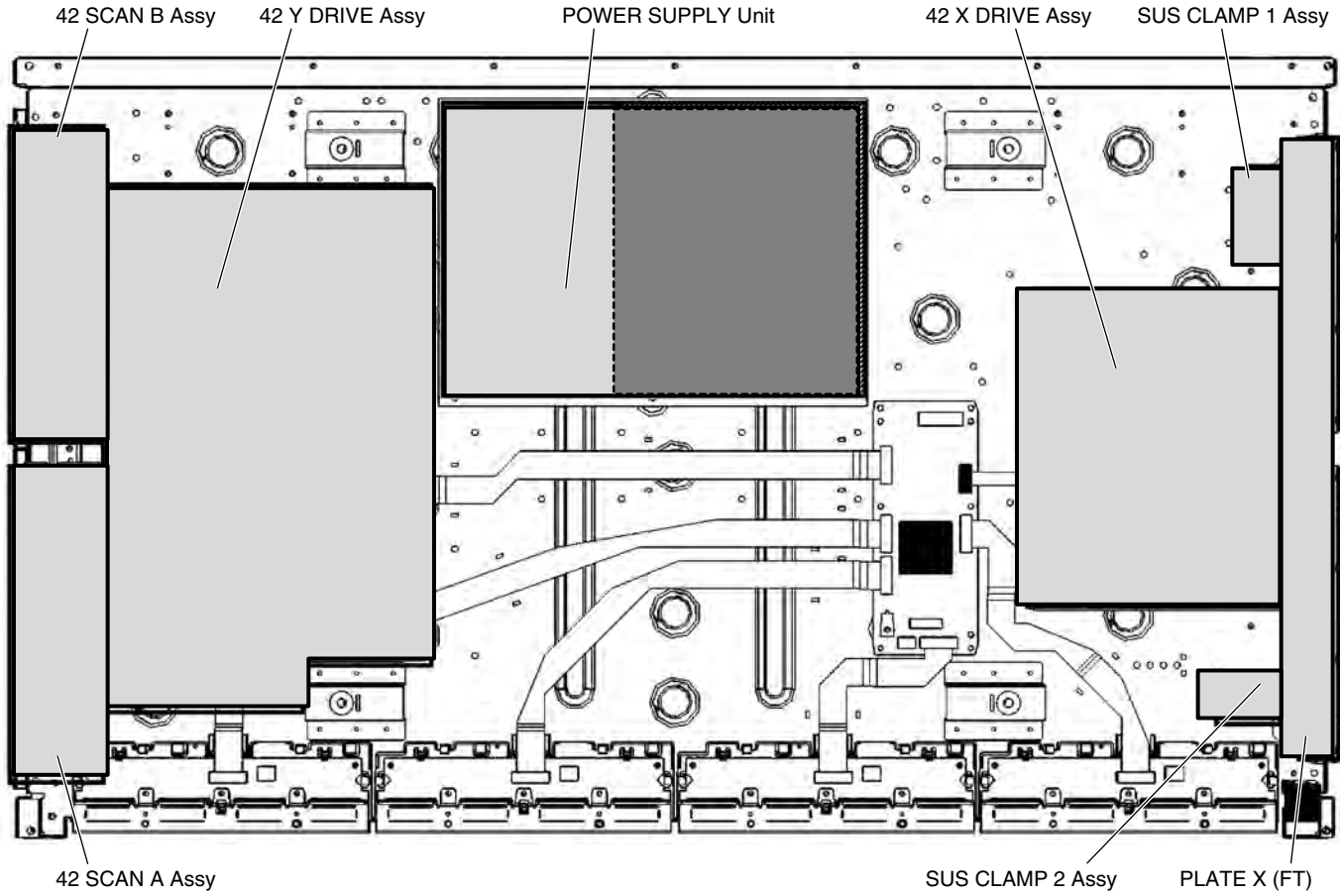


Fig.1 Charged Section and High Voltage Generating Point (Rear View)

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

CONTENTS

1. SPECIFICATIONS 7
2. EXPLODED VIEWS AND PARTS LIST 10
2.1 PACKING SECTION 10
2.2 FRONT and REAR SECTION 12
2.3 TERMINAL SECTION 14
2.4 MULTIBASE SECTION 16
2.5 FRAME SECTION 18
2.6 DRIVE SECTION 20
2.7 CHASSIS SECTION 22
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM 24
3.1 OVERALL CONNECTION DIAGRAM (1/2) 24
3.2 OVERALL CONNECTION DIAGRAM (2/2) 26
3.3 OVERALL BLOCK DIAGRAM (1/2) 28
3.4 OVERALL BLOCK DIAGRAM (2/2) 30
3.5 MAIN ASSY BLOCK DIAGRAM 32
3.6 COMMON SLOT ASSY 34
3.7 KEY, LED, SENB, SENC and SEND ASSYS 35
3.8 AUDIO and SUS COMM IF ASSYS 36
3.9 POWER BLOCK DIAGRAM 38
3.10 CONNECTOR PIN DESCRIPTION 40
5. PCB PARTS LIST 56
6. ADJUSTMENT 69
6.1 ADJUSTMENT REQUIRED WHEN THE SET IS REPAIRED OR REPLACED 69
6.2 ADJUSTMENT 70
6.3 SERVICE MENU LIST 73
6.4 SERVICE MENU 74
6.5 FACTORY MODE 76
6.6 RS-232C C0MMAND 87
6.7 METHOD FOR REPLACING THE SERVICE PANEL ASSY 115
7. GENERAL INFORMATION 121
7.1 DIAGNOSIS 121
7.1.1 PCB LOCATION 121
7.1.2 DIAGNOSIS OF SHUTDOWN/POWER-DOWN INDICATED BY LEDS 122
7.1.3 TROUBLESHOOTING 128
7.1.4 POWER ON/OFF FUNCTION FOR THE LARGE POWER SIGNAL SYSTEM 157
7.1.5 BACKUP WHEN THE MAIN UNIT IS ADJUSTED 158
7.1.6 HOW TO CLEAR HISTORY DATA 160
7.1.7 FAN CONTROL 162
7.1.8 POWER ON SEQUENCE 163
7.1.9 DISASSEMBLY 164
7.2 IC 170
8. PANEL FACILITIES 180

1. SPECIFICATIONS

General

Light emission panel ..... 42V type AC Plasma Panel
92.16 cm (W) x 51.53 cm (H) x 105.59 cm (diagonal)

Number of pixels ..... 1024 x 768

Power supply (for 425CMX)..... AC 100 - 120 V, 50/60 Hz
(for 42MXE10)..... AC 100 - 240 V, 50/60 Hz

Rated current (for 425CMX)..... 3.0 A - 2.5 A
(for 42MXE10)..... 3.0 A - 1.3 A

Standby power consumption (for 425CMX)..... 1.2 W
(for 42MXE10)..... 1.5 W

External dimensions
..... 1022 mm (W) x 610 mm (H) x 98 mm
(D: Not including handles)
40-1/4 in. (W) x 24 in. (H) x 3-7/8 in.
(D: Not including handles)

(including display stand)
..... 1218 mm (W) x 737 mm (H) x 300 mm (D)
47-31/32 in. (W) x 29-1/32 in. (H) x 11-13/16 in. (D)

Weight ..... 30.5 kg (67 lbs.)

(including display stand)..... 31.1 kg (69 lbs.)

Input/output

Video

INPUT1

(Input) Mini D-sub 15 pin (socket connector)
RGB signal (G ON SYNC compatible)
RGB ... 0.7 Vp-p/75Ω/no sync.
HD/VS, VD ... TTL level
/positive and negative polarity
/2.2 kΩ
G ON SYNC
... 1 Vp-p/75 /negative sync.
*Compatible with Microsoft " Plug & Play"
(VESA DDC1/2B)

(Output) Mini D-sub 15 pin (socket connector)
75Ω /with buffer

INPUT2

(Input) DVI-D 24-pin connector
Digital RGB signal (DVI compliant TMDS signal)
*Compatible with Microsoft " Plug & Play"
(VESA DDC 2B)

Audio

(Input) AUDIO INPUT (for INPUT1)
Stereo mini jack
L/R ... 500 mVrms/more than 10 kΩ

AUDIO INPUT (for INPUT2)
Stereo mini jack
L/R ... 500 mVrms/more than 10 kΩ

(Output) AUDIO OUTPUT
Stereo mini jack
L/R ... 500 mVrms (max)/less than 5 kΩ

SPEAKER
L/R ... 6 Ω/8 W +8 W (at 6Ω)

Control

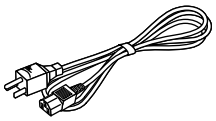
RS-232C... D-sub 9 pin (pin connector)
COMBINATION IN/OUT
... Mini DIN 6 pin (x2)

Accessories

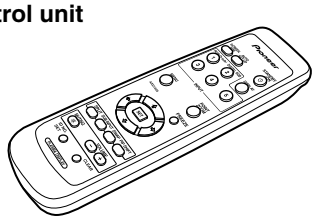
Power cord (for 425CMX)..... 1
Remote control unit 1
Remote control unit holder 1
AA (R6) batteries..... 2
Cleaning cloth (for screen) 1
Speed clamps..... 5
Display stands 2
Washers 2
Hex hole bolts (M8X40)..... 2
Ferrite cores (for power cord) 2
Ferrite cores (for audio cables)..... 3
Cable ties 2
Operating Instructions (for 425CMX)..... 1
Operating Instructions (CD-ROM) (for 42MXE10)..... 1
Start up Guide (for 42MXE10) 1
Warranty(for 425CMX)..... 1

● Due to improvements, specifications and design are subject to change without notice.

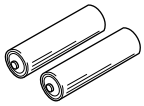
① **Power cord**
(ADG1215)



② **Remote control unit**
(AXD1528)

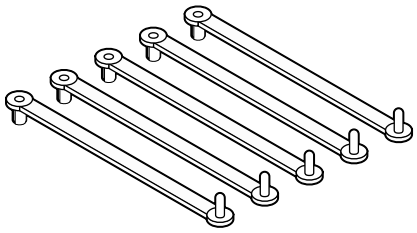


③ **AA (R6) batteries (x 2)**

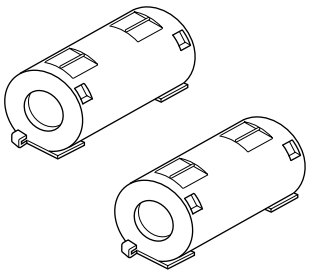


④ **Cleaning cloth (for screen)**
(AED1285)

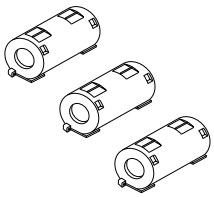
⑤ **Speed clamps (x 5)**
(AEC2051)



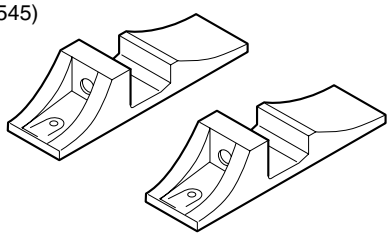
⑥ **Ferrite cores (x 2) (for power cord)**
(ATX1031)



⑦ **Ferrite cores (x 3) (for audio cables)**
(CTX1054)

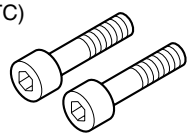


⑧ **Display stands (x 2)**
(AMR3545)

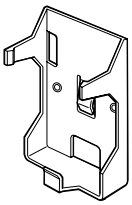


⑨ **Washers (x 2)**
(WB80FTC)

⑩ **Hex hole bolts (x 2)**
(SMZ80H400FTC)

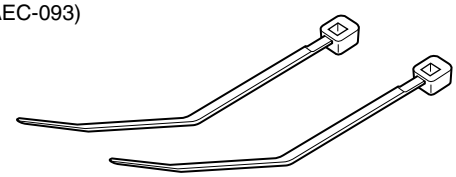


⑪ **Remote control unit holder**
(AMR3268)



Use as a holder for the remote control unit. When attaching to the rear of the main unit, be careful not to cover the vents.

⑫ **Cable ties (x 2)**
(AEC-093)



- **These Operating Instructions**
- **Warranty**

A

B

C

D

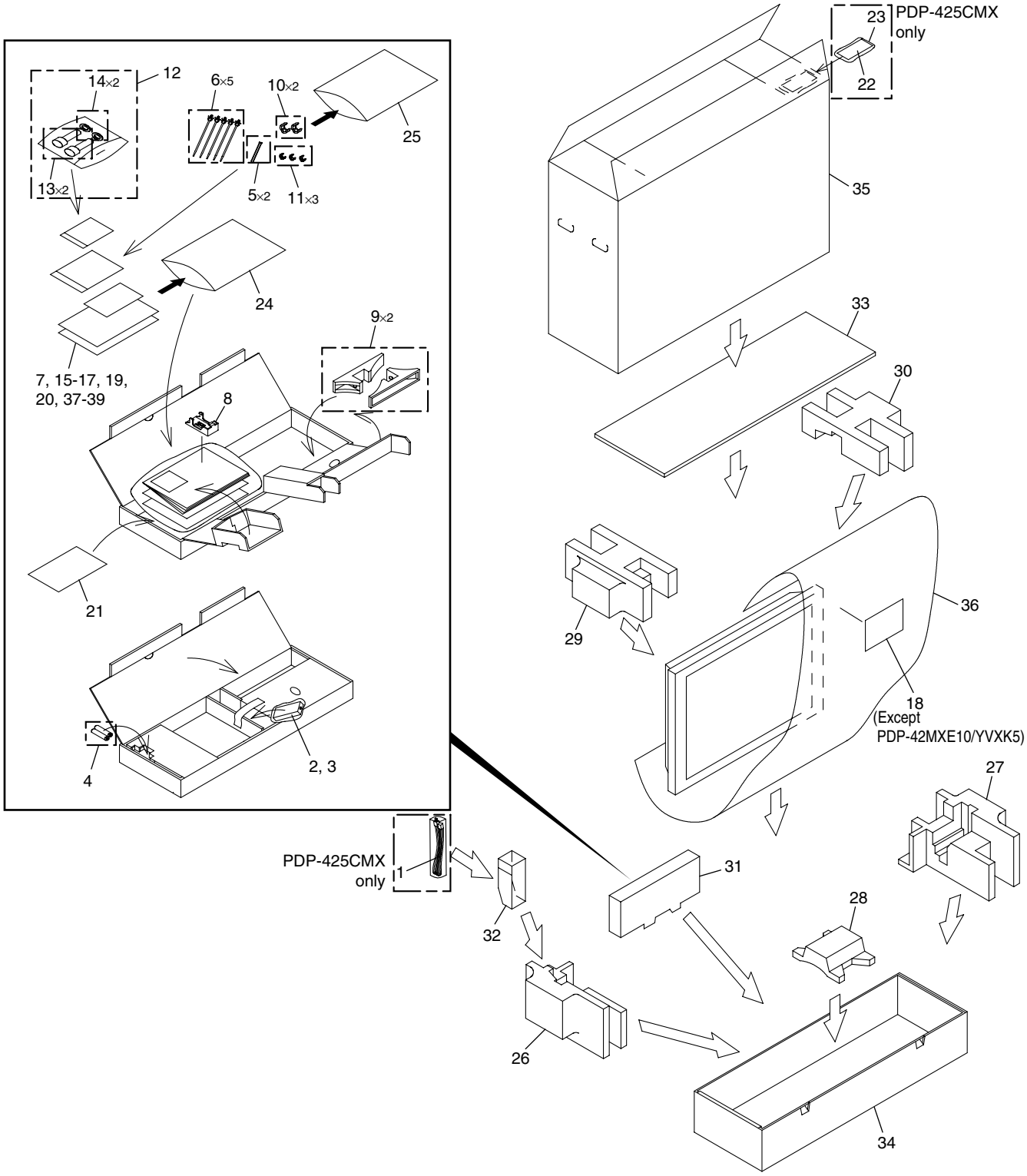
E

F

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

2.1 PACKING SECTION



(1) PACKING SECTION PARTS LIST

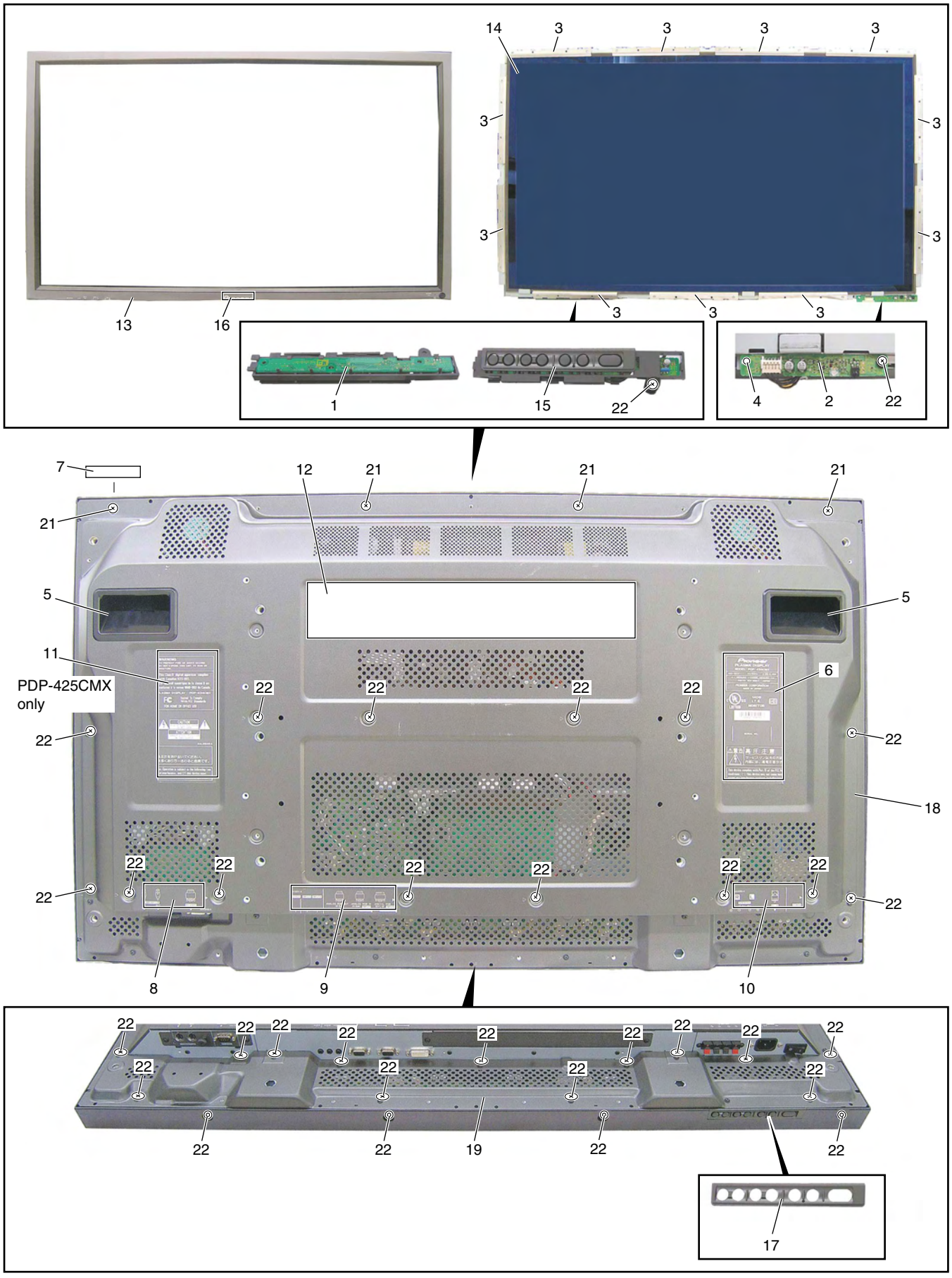
Mark	No.	Description	Part No.
⚠	1	Power Cord	See Contrast table (2)
	2	Remote Control Unit	AXD1528
	3	Battery Cover	AZN2462
NSP	4	Dry Cell Battery (R6P, AA)	VEM1031
	5	Cable tie	AEC-093
	6	Speed clamp	AEC2051
	7	Cleaning Cloth	AED1285
	8	Remote Control Holder	AMR3268
	9	Display Stand	AMR3545
	10	Ferrite Core (for power cord)	ATX1031
	11	Ferrite Core (for audio cables)	CTX1054
	12	Screws Set	AXX1071
	13	Hex hole bolt	SMZ80H400FTC
	14	Washer	WB80FTC
	15	Operating Instructions (English, French, Japanese)	See Contrast table (2)
	16	Operating Instructions (English)	See Contrast table (2)
	17	Operating Instructions (7L)(CD-ROM)	See Contrast table (2)
	18	Caution Sheet	See Contrast table (2)
	19	Caution Sheet	ARM1245
	20	Caution Sheet	See Contrast table (2)
NSP	21	Warranty Card	See Contrast table (2)
NSP	22	Warranty Card	See Contrast table (2)
NSP	23	Polyethylene Bag	See Contrast table (2)
	24	Catalogue Bag	AHG1310
	25	Catalogue Bag S	AHG1338
	26	Pad BL (FT)	See Contrast table (2)
	27	Pad BR (FT)	See Contrast table (2)
	28	Pad BC (FT)	See Contrast table (2)
	29	Pad TL (FT)	See Contrast table (2)
	30	Pad TR (FT)	See Contrast table (2)
	31	Accessory Case	See Contrast table (2)
	32	Power Cord Case	See Contrast table (2)
	33	Reinforce Pad (FT)	See Contrast table (2)
	34	Carton (42FT)	See Contrast table (2)
	35	Upper Carton	See Contrast table (2)
	36	Mirror Mat	See Contrast table (2)
	37	Plasma Caution Sheet	See Contrast table (2)
	38	Image Caution Sheet	See Contrast table (2)
	39	Image Stick Caution Sheet	See Contrast table (2)

(2) CONTRAST TABLE

PDP-425CMX/LUC5, PDP-42MXE10/LDFK5 and YVXK5 are constructed the same except for the following:

Mark	No.	Symbol and Description	PDP-425CMX /LUC5	PDP-42MXE10 /LDFK5	PDP-42MXE10 /YVXK5
⚠	1	Power Cord	ADG1215	Not used	Not used
	15	Operating Instructions (English, French, Japanese)	ARD1070	Not used	Not used
	16	Operating Instructions (English)	Not used	ARE1419	ARE1419
	17	Operating Instructions (7L)(CD-ROM)	Not used	ARU1001	ARU1001
	18	Caution Sheet	ARM1201	ARM1201	Not used
	20	Caution Sheet	Not used	Not used	ARM1279
NSP	21	Warranty Card	ARY1146	Not used	Not used
NSP	21	Warranty Card (EU)	Not used	ARY1149	ARY1149
NSP	22	Warranty Card	ARY1146	Not used	Not used
NSP	23	Polyethylene Bag	AHG-195	Not used	Not used
	26	Pad BL (FT)	AHA2495	AHA2495	AHA2528
	27	Pad BR (FT)	AHA2496	AHA2496	AHA2529
	28	Pad BC (FT)	AHA2497	AHA2497	AHA2530
	29	Pad TL (FT)	AHA2522	AHA2522	AHA2531
	30	Pad TR (FT)	AHA2523	AHA2523	AHA2532
	31	Accessory Case	AHC1072	AHC1072	AHC1078
	32	Power Cord Case	AHC1077	AHC1077	AHC1081
	33	Reinforce Pad	AHC1079	AHC1079	AHC1080
	34	Carton (42FT)	AHD3417	AHD3417	AHD3458
	35	Upper Carton	AHD3418	AHD3455	AHD3461
	36	Mirror Mat	AHG1284	AHG1284	AHG1327
	37	Plasma Caution Sheet	ARM1147	Not used	Not used
	38	Image Caution Sheet	ARM1220	Not used	Not used
	39	Image Stick Caution Sheet	ARM1299	Not used	Not used

2.2 FRONT and REAR SECTION



(1) FRONT and REAR SECTIONS PARTS LIST

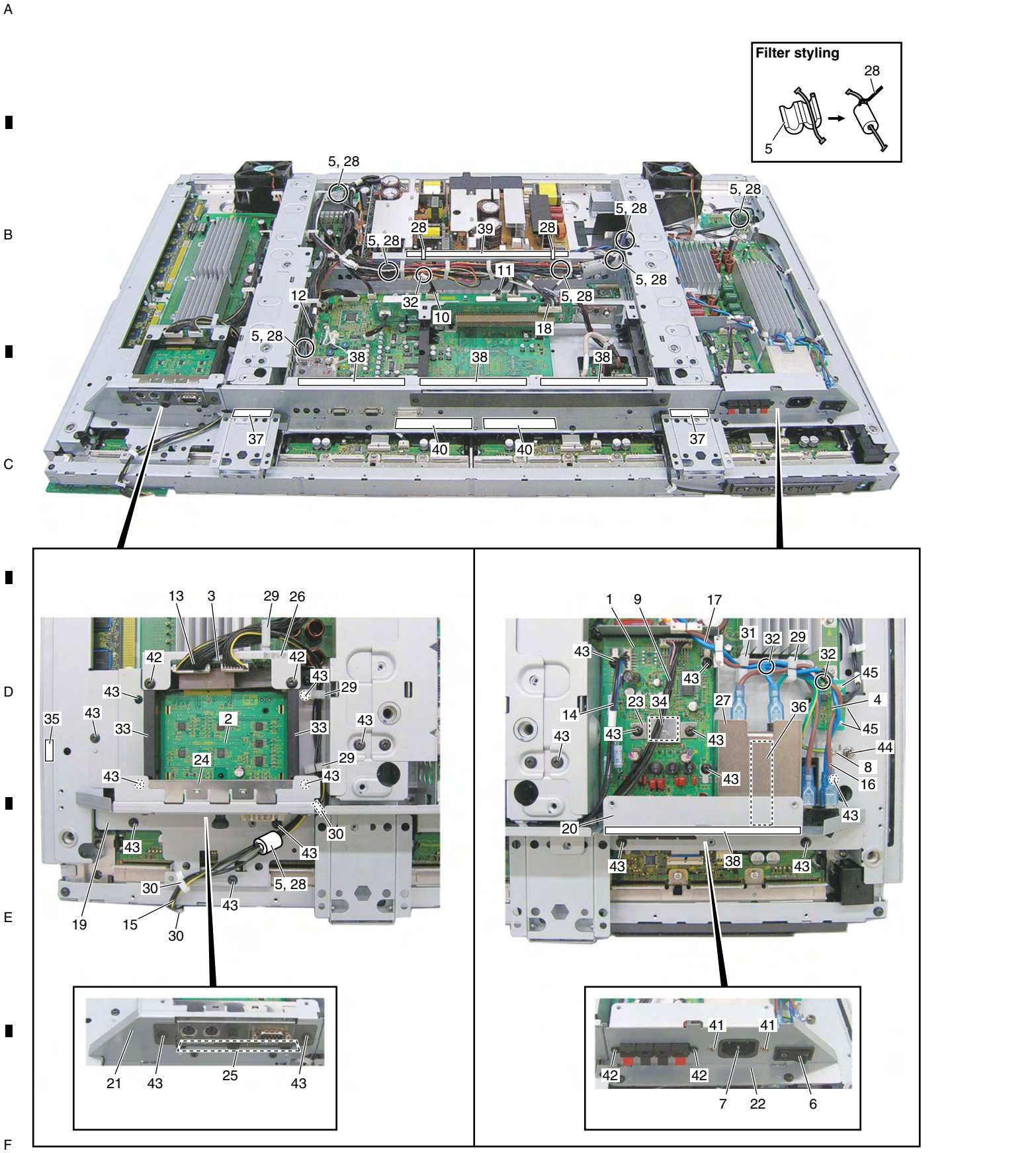
Mark	No.	Description	Part No.
	1	KEY Assy	AWW1108
	2	LED2 Assy	AWW1109
NSP	3	Panel Holder (FT)	ANG2840
	4	PCB Spacer	AEC1947
	5	Inner Grip Assy	AMR3434
NSP	6	Name Label	See Contrast table (2)
	7	Serial Sheet	AAX3143
	8	Terminal Label MAIN A (CMX)	See Contrast table (2)
	9	Terminal Label MAIN B (CMX)	See Contrast table (2)
	10	Terminal Label MAIN C (CMX)	See Contrast table (2)
	11	Caution Label (CMX)	See Contrast table (2)
	12	Caution Label	See Contrast table (2)
	13	Front Case Assy (425CMX)	AMB2885
⚠	14	Filter (FT)	AMR3510
	15	Control Button (CMX)	AAC1559
	16	Pioneer Badge	AAM1101
	17	Control Cover (CMX)	AMR3512
	18	Rear Case	ANE1650
	19	Bottom Cover (CMX)	ANG2860
	20	•••••	
	21	Screw	ABZ30P100FTB
	22	Screw	AMZ30P060FTB

(2) CONTRAST TABLE

PDP-425CMX/LUC5, PDP-42MXE10/LDFK5 and YVXK5 are constructed the same except for the following:

Mark	No.	Symbol and Description	PDP-425CMX /LUC5	PDP-42MXE10 /LDFK5	PDP-42MXE10 /YVXK5
NSP	6	Name Label (CMX)	AAL2726	Not used	Not used
NSP	6	Name Label (MXE)	Not used	AAL2734	AAL2746
	8	Terminal Label MAIN A (CMX)	AAX3250	AAX3250	AAX3292
	9	Terminal Label MAIN B (CMX)	AAX3251	AAX3251	AAX3293
	10	Terminal Label MAIN C (CMX)	AAX3252	AAX3252	AAX3294
	11	Caution Label (CMX)	AAX3253	Not used	Not used
	12	Caution Label M	AAX3304	AAX3304	Not used
	12	Caution Label	Not used	Not used	AAX3295

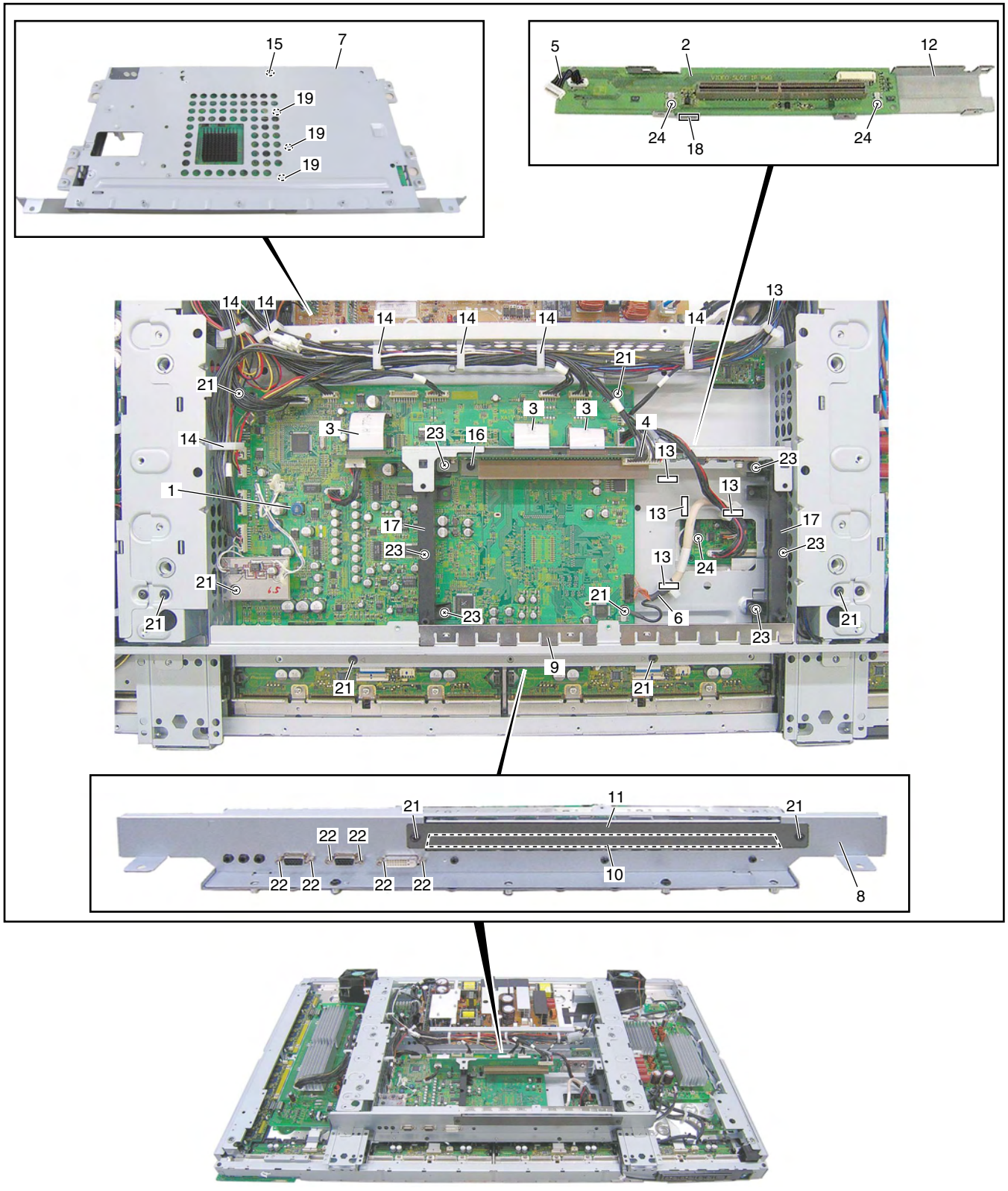
2.3 TERMINAL SECTION



TERMINAL SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	AUDIO Assy	AWW1105
	2	COMMSLOT Assy	AWW1106
	3	COMMSLOT IF Assy	AWW1107
	4	SENC Assy	AWW1103
	5	Filter	CTX1054
⚠	6	Power Switch (S1)	ASG1094
⚠	7	AC Inlet (CN1)	AKP1296
	8	1P Wire GND (J209)	ADX3242
	9	9P Housing Wire (J220)	ADX3262
	10	7P Housing Wire (J201)	ADX3263
	11	13P Housing Wire (J202)	ADX3264
	12	8P Housing Wire (J204)	ADX3265
	13	40P Housing Wire (J205)	ADX3268
	14	6P Housing Wire (J222)	ADX3270
	15	8P Housing Wire (J221)	ADX3283
	16	Housing Wire (J216)	ADX3284
	17	Housing Wire (J210)	ADX3285
	18	13P Housing Wire (J218)	ADX3286
	19	COMM Bracket (CMX)	ANG2857
	20	Terminal Panel AC (CMX)	ANG2863
	21	Terminal Panel COMM (CMX)	ANG2874
	22	AC Bracket (CMX) Assy	ANG2901
NSP	23	Audio Heatsink	ANH1648
	24	Slot Spring T94	ABK1034
	25	Slot Spring B92	ABK1035
	26	COMM I/F Bracket (CMX)	ANG2859
	27	Inlet Cover (XM4)	ANG2899
	28	Nyron Binder	AEC-093
	29	Wire Saddle	AEC1745
	30	Mini Clamp	AEC1805
	31	Harness Lifter 18	AEC1980
	32	Omega Lock	AEC2084
	33	COMM Rail (CMX)	AMR3486
	34	Thermal Sheet AUDIO	AMR3507
	35	Gasket	ANK1823
	36	Gasket	ANK1827
	37	Gasket	ANK1828
	38	Gasket	ANK1829
	39	Gasket	ANK1830
	40	Gasket	ANK1831
	41	Screw	ABA1342
	42	Screw	ABZ30P100FTB
	43	Screw	AMZ30P060FTB
	44	Screw	BMP40P080FBN
	45	PCB Spacer	AEC1941

2.4 MULTIBASE SECTION



(1) MULTI BASE SECTION PARTS LIST

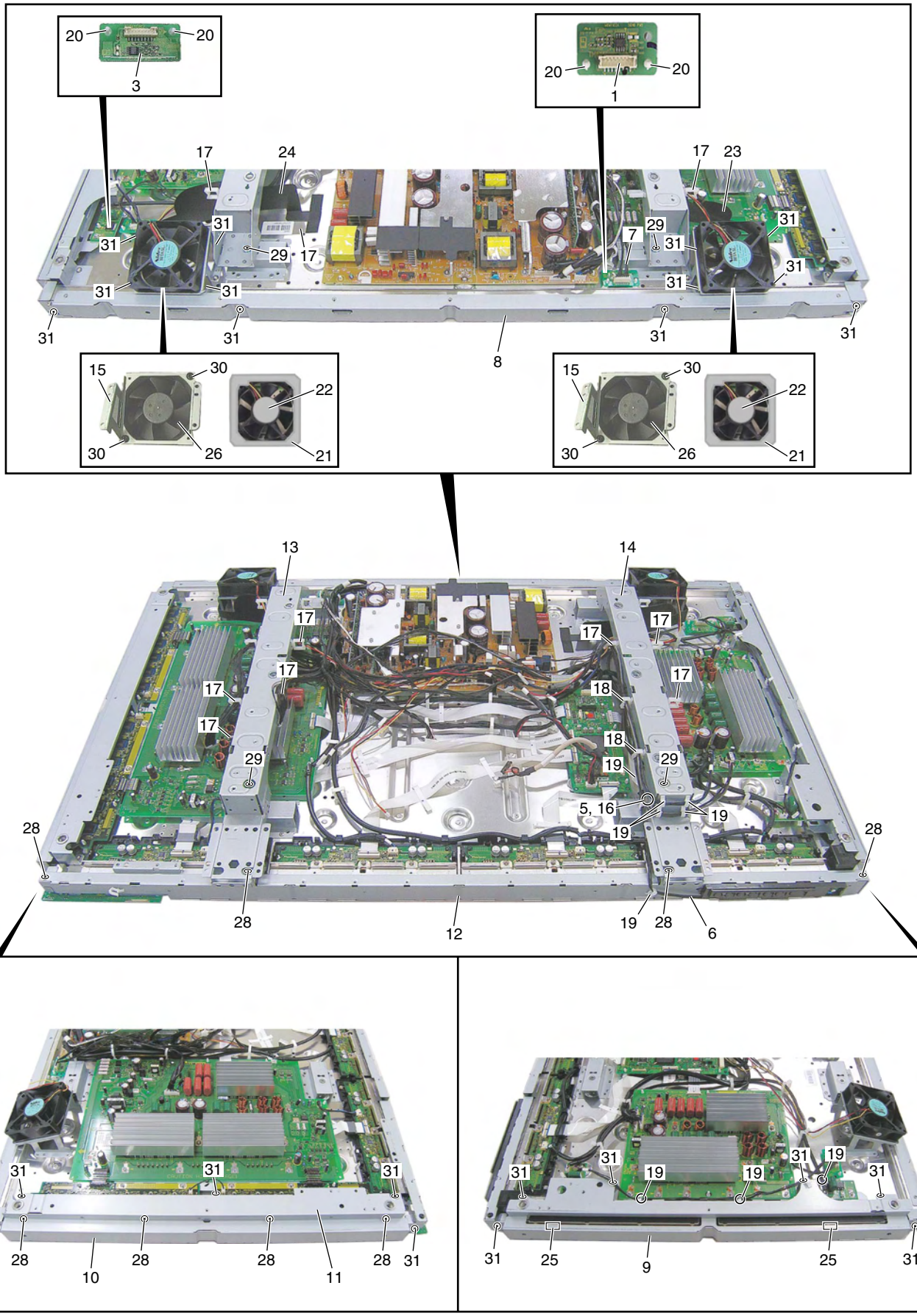
Mark	No.	Description	Part No.
	1	MAIN Assy	See Contrast table (2)
	2	VSIF Assy	See Contrast table (2)
	3	Flexible Cable (J219)	ADD1342
	4	20P Housing Wire (J215)	ADX3273
	5	20P Housing Wire (J217)	ADX3274
	6	LVDS Cable (J223)	ADX3276 (or ADX3289)
	7	Multi Base (CMX)	ANA1901
	8	Terminal Panel MAIN (CMX) Assy	ANG2871
	9	Slot Spring T130	ABK1032
	10	Slot Spring B126	ABK1033
	11	Slot Panel 262 (N)	ANG2610
	12	VIDEO I/F Bracket	ANG2858
	13	Wire Saddle	AEC1745
	14	Wire Saddle	AEC1797
	15	PCB Support	AEC1958
	16	Rivet	AMR1066
	17	VIDEO Guide Rail	AMR3485
	18	VIDEO I/F Sheet	AMR3495
	19	PWB Sleeve	AMR3518
	20	•••••	
	21	Screw	AMZ30P060FTB
	22	Hex Head Screw	BBA1051
	23	Screw	PMB30P100FNI
	24	Screw	VBB30P080FNI

(2) CONTRAST TABLE

PDP-425CMX/LUC5, PDP-42MXE10/LDFK5 and YVXK5 are constructed the same except for the following:

Mark	No.	Symbol and Description	PDP-425CMX /LUC5	PDP-42MXE10 /LDFK5	PDP-42MXE10 /YVXK5
	1	MAIN Assy	AWW1100	AWW1112	AWW1112
	2	VSIF Assy	AWW1101	AWW1113	AWW1113

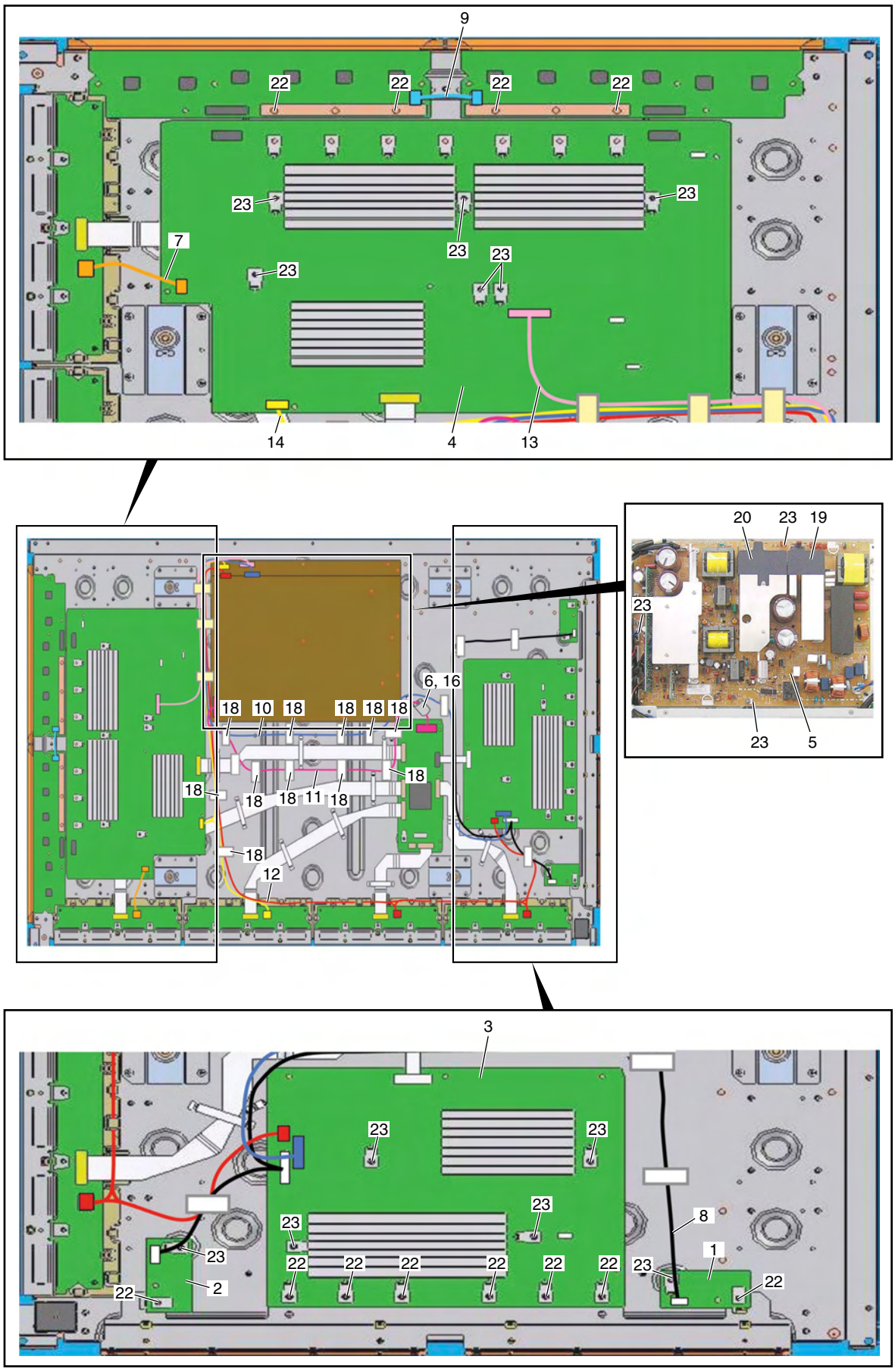
2.5 FRAME SECTION



FRAME SECTION PARTS LIST

Mark No.	Description	Part No.
1	SENB Assy	AWW1102
2	• • • • •	
3	SEND Assy	AWW1104
4	• • • • •	
5	Filter	CTX1054
6	3P Housing Wire (J206)	ADX3266
7	4P Housing Wire (J207)	ADX3267
8	Front Chassis U (FT)	ANA1907
9	Front Chassis R (FT)	ANA1918
10	Front Chassis LA	ANA1926
11	Front Chassis LB (FT)	ANA1928
12	Front Chassis B (CMX)	ANA1933
13	Sub Frame L Assy (CMX)	ANG2875
14	Sub Frame R Assy (CMX)	ANG2876
15	Fan Angle (FT)	ANG2909
16	Nyron Binder	AEC-093
17	Wire Saddle	AEC1745
18	Wire Saddle	AEC1751
19	Mini Clamp	AEC1805
20	PCB Spacer	AEC1941
21	Cushion A	AED1293
22	Cushion B	AED1294
23	Duct Sheet L (FT)	AMR3515
24	Duct Sheet R (FT)	AMR3532
25	Gasket	ANK1823
26	Fan Motor 80 x 25L	AXM1054
27	• • • • •	
28	Screw	AMZ30P060FTB
29	Screw	PMB50P120FTC
30	Screw	PPZ50P100FTB
31	Screw	VBB30P080FNI

2.6 DRIVE SECTION

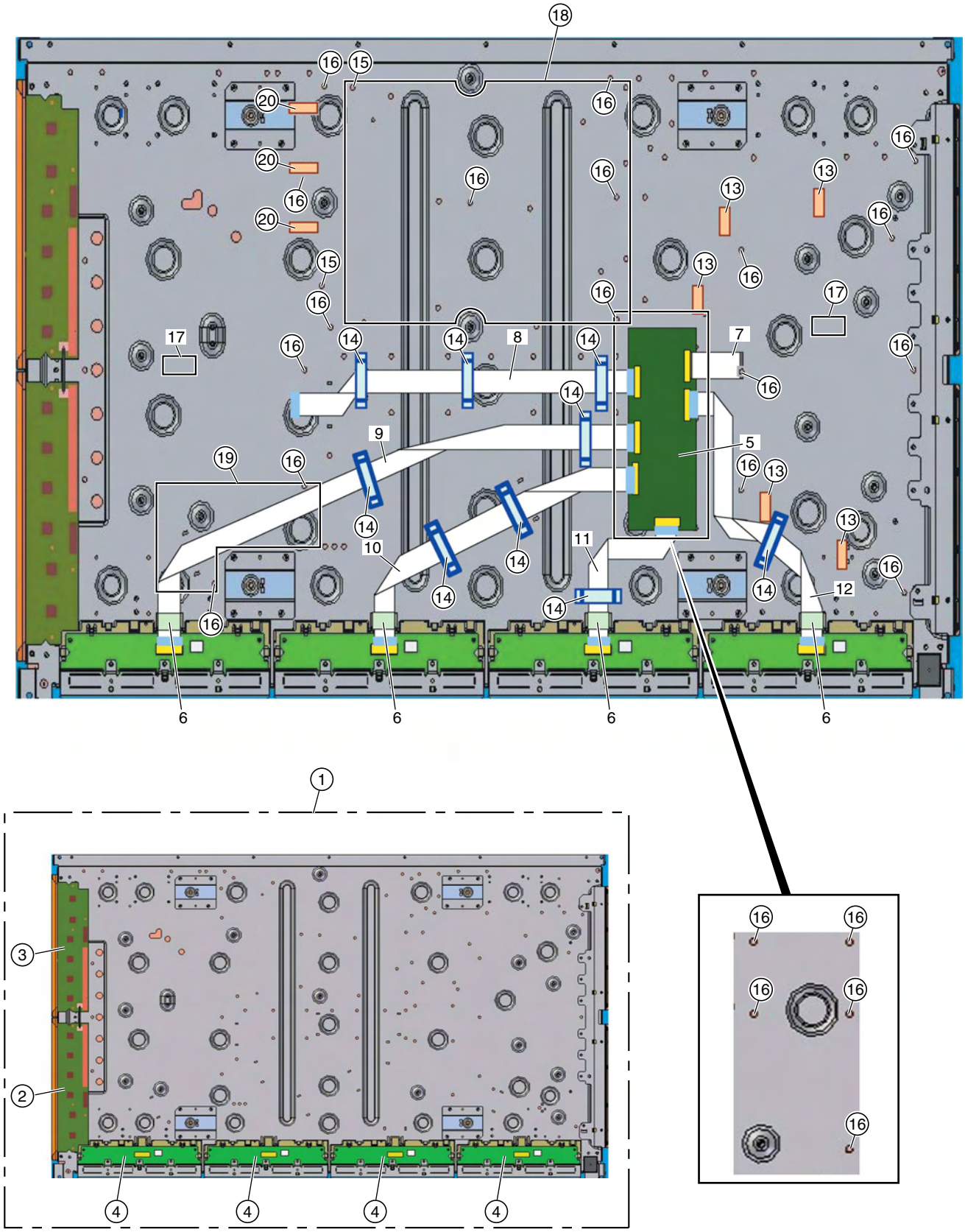


DRIVE SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	SUS CLAMP 1 Assy	AWW1022
	2	SUS CLAMP 2 Assy	AWW1023
	3	42 X DRIVE Assy	AWW1067
	4	42 Y DRIVE Assy	AWV2251
⚠	5	POWER SUPPLY Unit	AXY1127
	6	Ferrite Core	ATX1039
	7	4P Housing Wire (J101)	ADX3192
	8	6P Housing Wire (J102)	ADX3193
	9	3P Housing Wire (J103)	ADX3194
	10	8P Housing Wire (J105)	ADX3196
	11	14P Housing Wire (J106)	ADX3292
	12	5P Housing Wire (J108)	ADX3199
	13	9P Housing Wire (J104)	ADX3278
	14	6P Housing Wire (J107)	ADX3280
	15	•••••	
	16	Nyron Binder	AEC-093
	17	•••••	
	18	Locking Wire Saddle	AEC1992
	19	HS Sheet S (FT)	AMR3519
	20	HS Sheet L (FT)	AMR3520
	21	•••••	
	22	Screw	PMB30P060FTC
	23	Screw	VBB30P080FNI

2.7 CHASSIS SECTION

Note : The parts of encircled number denote measuring component of PDP Service Assy.



(1) PANEL CHASSIS SECTION PARTS LIST

Mark	No.	Description	Part No.
NSP	1	Panel Chassis (FT) Assy	See Contrast table (2)
	2	42 SCAN A Assy	AWW1071
	3	42 SCAN B Assy	AWW1072
	4	42 ADDRESS Assy	AWV2253
	5	MD DIGITAL Assy	AWV2254
	6	Ferrite Core	ATX1048
	7	Flexible Cable (J109)	ADD1329
	8	Flexible Cable (J110)	ADD1330
	9	Flexible Cable (J117)	ADD1331
	10	Flexible Cable (J119)	ADD1332
	11	Flexible Cable (J120)	ADD1333
	12	Flexible Cable (J211)	ADD1334
	13	Wire Saddle	AEC1745
	14	Flat Clamp	AEC1879
	15	PCB Support	AEC1938
	16	PCB Spacer	AEC1941
	17	Drive Silicone Sheet	AEH1095
	18	Power Sheet (FT)	AMR3521
	19	Y Drive Protect Sheet (FT)	AMR3525
	20	Harness Lifter 18	AEC1980

(2) CONTRAST TABLE

PDP-425CMX/LUC5, PDP-42MXE10/LDFK5 and YVXK5 are constructed the same except for the following:

Mark	No.	Symbol and Description	PDP-425CMX /LUC5	PDP-42MXE10 /LDFK5	PDP-42MXE10 /YVXK5
NSP	1	Panel Chassis (FT) Assy	AWU1136	AWU1136	AWU1151

2.8 PDP SERVICE ASSY

PDP SERVICE ASSY PARTS LIST

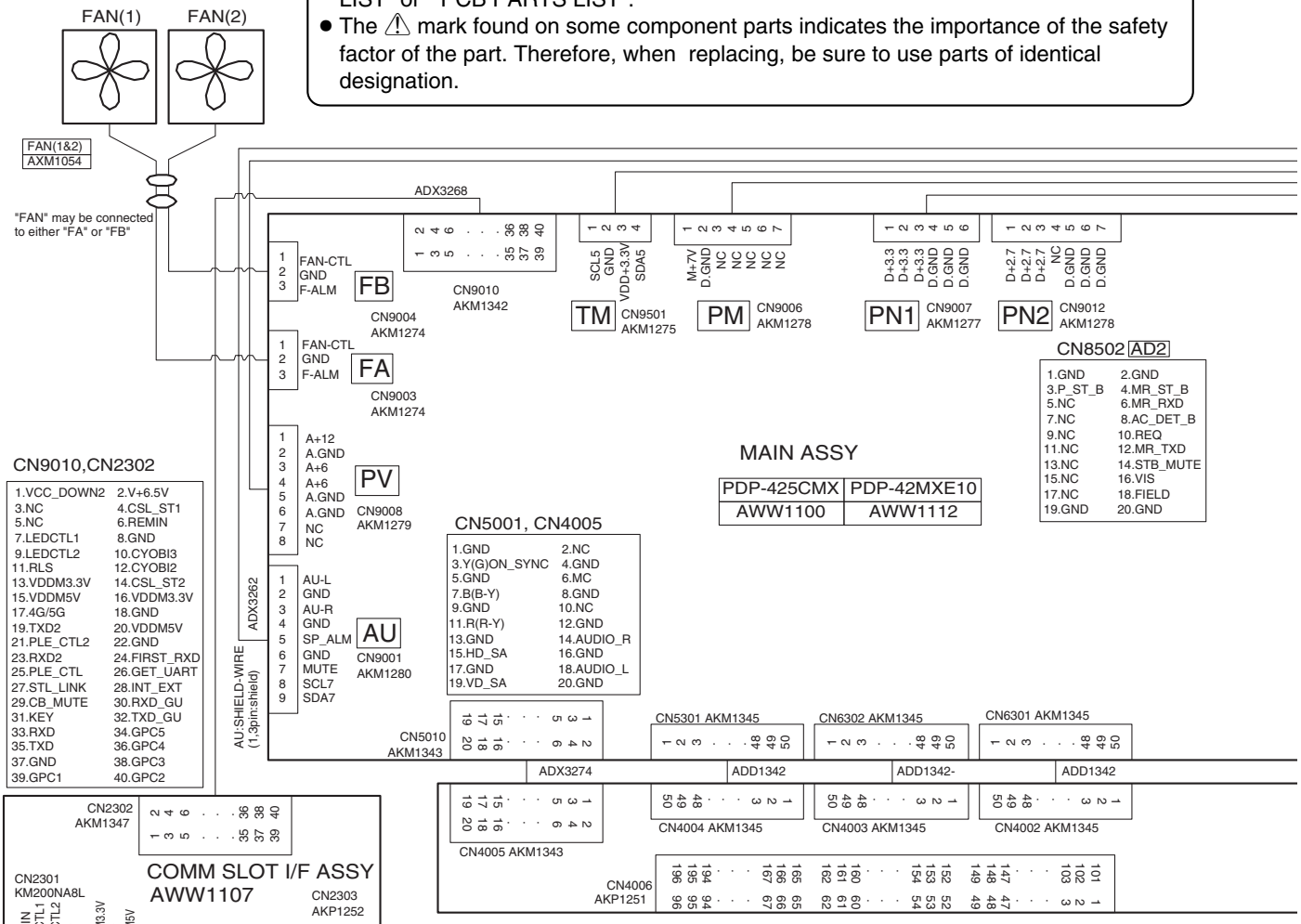
Mark	No.	Description	Part No.	
		PDP Service Assy 42H6D1	AWU1160	
NSP		Panel Chassis (FT) Assy	AWU1136	
		Wire Saddle	AEC1745	x5
		Flat Clamp	AEC1879	x9
		PCB Support	AEC1938	x2
		PCB Spacer	AEC1941	x22
		Harness Lifter 18	AEC1980	x2
		Power Sheet (FT)	AMR3521	
		Y Drive Protect Sheet (FT)	AMR3525	
		Caution Label	AAX3031	x2
		Screw	PMB50P150FTC	x4

Mark	No.	Description	Part No.	
Accessories				
		Wire Saddle	AEC1745	x13
		PCB Spacer	AEC1941	x4
		Harness Lifter 18	AEC1980	
		Locking Wire Saddle	AEC1992	x11
		Vinyl Bag S	AHG1338	
		Sheet (FT)	AMR3530	x2
Packing parts				
		Pad 42 Single (T-L)	AHA2550	
		Pad 42 Single (T-R)	AHA2551	
		Pad 42 Single (B-L)	AHA2552	
		Pad 42 Single (B-R)	AHA2553	
		Upper Carton (42 Single)	AHD3480	
		Under Carton (42 Single)	AHD3481	
		Polyethylene Bag	AHG1381	
		Packing Sheet	AHG1386	
		Tray (FT)	AHX1158	
		Cup Spacer (15)	ANG2936	x4

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 OVERALL CONNECTION DIAGRAM (1/2)

- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.



CN4006 Card edge connector

1.GND	2.GND	101.GND	102.GND
3.G	4.GND	103.GND	104.SCL_VS
5.B	6.GND	105.GND	106.SDA_VS
7.R	8.GND	107.GND	108.GND
9.HD_SA	10.GND	109.GND	110.V+12V
11.VD_SA	12.GND	111.GND	112.V+12V
13.AUDIO_L	14.GND	113.GND	114.V+3.3STB
15.AUDIO_R	16.GND	115.V+13.5	116.V+13.5
17.SLOT_ST1	18.S_DIN_SEL	117.IN4_DET	118.IN3_DET
19.FNC1	20.FNC0	119.SLOT_ST2	120.IR
21.V+3.3V	22.V+3.3V	121.NC	122.NC
23.NC	24.GND	123.GND	124.GND
25.HD_DET	26.GND	125.3G4G	126.IN5_DET
27.VD	28.GND	127.GND	128.DE
29.HD	30.GND	129.GND	130.CLK
31.GND	32.RB0	131.GND	132.BA7
33.RB1	34.RB2	133.BA6	134.BA5
35.RB3	36.RB4	135.BA4	136.BA3
37.RB5	38.RB6	137.BA2	138.BA1
39.RB7	40.GND	139.BA0	140.GND
41.GND	42.GB0	141.GND	142.GA7
43.GB1	44.GB2	143.GA6	144.GA5
45.GB3	46.GB4	145.GA4	146.GA3
47.GB5	48.GB6	147.GA2	148.GA1
49.GB7	52.GND	149.GA0	152.GND
53.GND	54.BB0	153.GND	154.RA7
55.BB1	56.BB2	155.RA6	156.RA5
57.BB3	58.BB4	157.RA4	158.RA3
59.BB5	60.BB6	159.RA2	160.RA1
61.BB7	62.GND	161.RA0	162.GND
65.GND	66.GND	165.GND	166.GND
67.KEY	68.NC	167.VSEPSCL	168.VSEPSDA
69.TXD_CARD	70.RXD_CARD	169.NC	170.GET_UART
71.INT_EXT	72.NC	171.FIRST_RXD	172.NC
73.EMGREQ1_V	74.EMGREQ2_V	173.EMGREQ1_S	174.EMGREQ2_S
75.IC1V_OE	76.RESETX1	175.IC1S_OE	176.NC
77.NC	78.SD_SEL	177.NC	178.NC
79.FNC2	80.FNC3	179.SLOT_ST3	180.M_CHOICE
81.SOUND1	82.GND	181.SOUND2	182.GND
83.DSUBR	84.GND	183.GND	184.DSUBH
85.DSUBG	86.GND	185.GND	186.DSUBV
87.SDUBB	88.GND	187.GND	188.GND
89.IN5_HD	90.SOUSA_X	189.IN5_VD	190.HYOUJI_X
91.GPC1	92.GPC2	191.GPC3	192.GPC4
93.GPC5	94.VYOBI1	193.NC	194.VYOBI4
95.VYOBI2	96.DSUNSW_DET	195.VYOBI5	196.VYOBI6

CN2303,Card edge connector

1.NC	101.NC
2.IRSW	102.GND
3.IR_COMM_OUT	103.GND
4.IR_COMM_IN	104.GND
5.GND	105.TXD_PDP
6.GND	106.RXD_PDP
7.GND	107.KEY_COMM_IN
8.CYOBI3	108.CB_MUTE
9.CYOBI2	109.STL_LINK
10.CSL_ST2	110.GND
11.CSL_ST1	111.GND
14.GND	114.V+6.5V
15.GND	115.V+6.5V
16.FIRST_RXD	116.GND
17.GET_UART	117.GND
18.INT_EXT	118.VDDM3.3V
19.RXD_CARD	119.VDDM3.3V
20.TXD_CARD	120.VDDM5
21.GPC5	121.APL_CTL1
22.GPC4	122.APL_RXD
23.GPC3	123.APL_CTL2
24.GPC2	124.APL_TXD
25.GPC1	125.SLT_Vrer

CN4004→CN5301

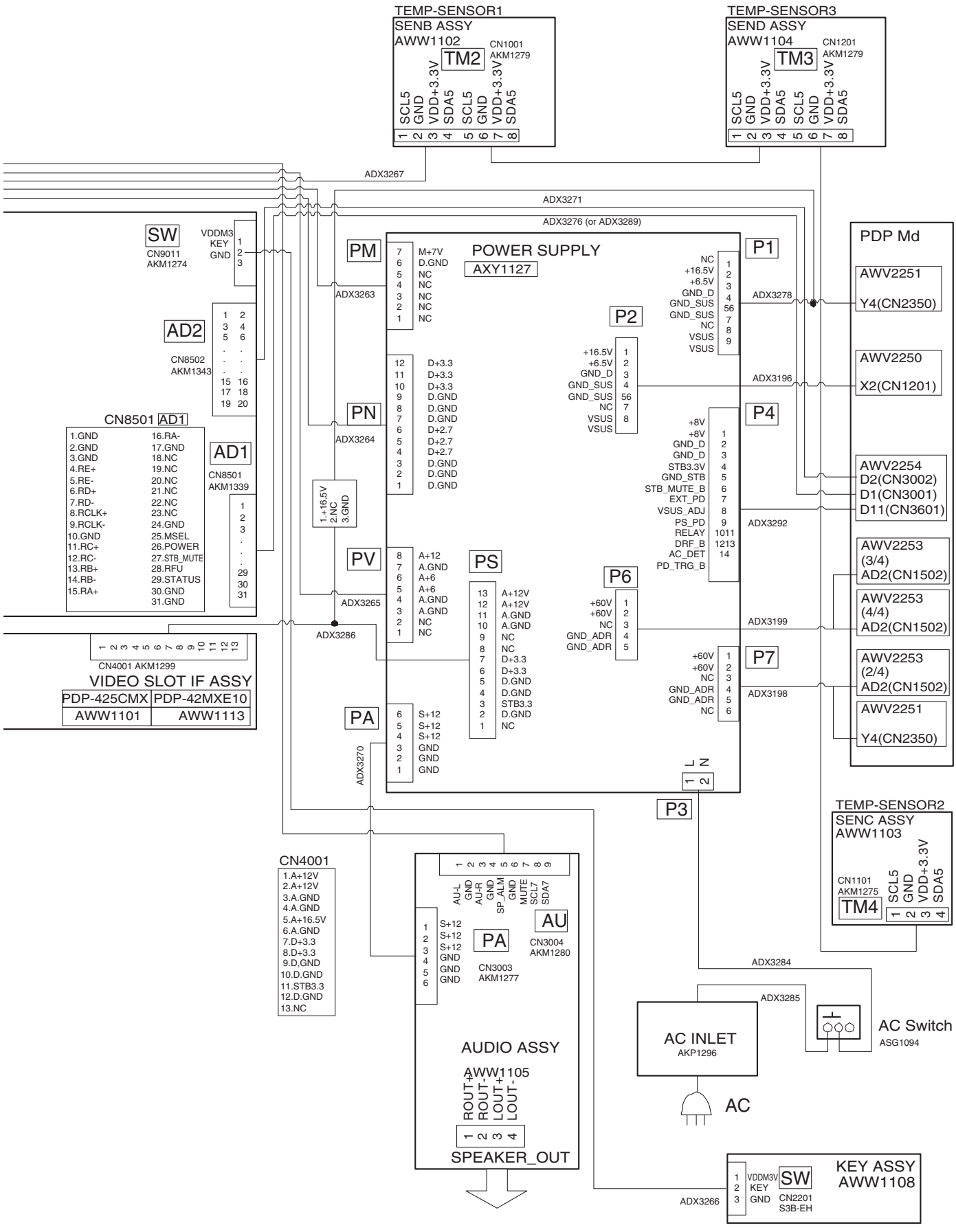
1.←50.VDDM3.3V	26.→25.GPC4
2.→49.NC	27.→24.GPC2
3.→48.NC	28.→23.GPC5
4.→47.KEY	29.→22.GND
5.→46.GND	30.→21.VYOBI1
6.→45.GET_UART	31.→10.VYOBI2
7.→44.TXD_CARD	32.→19.GND
8.→43.FIRST_RXD	33.→18.DSUBSW_DET
9.→42.RXD_CARD	34.→17.G4G
10.→41.INT_EXT	35.→16.FNC0
11.→40.GND	36.→15.IR
12.→39.RESETX1	37.→14.SLOT_ST2
13.→38.SLOT_ST3	38.→13.FNC1
14.→37.SD_SEL	39.→12.S_DIN_SEL
15.→39.SOUND2	40.→11.SLOT_ST1
16.→35.FNC3	41.→10.IN4_DET
17.→34.FNC2	42.→ 9.GND
18.→33.SOUND1	43. →8.SDA_VS
19.→32.GND	44. →7.SCL_VS
20.→31.IN5_VD	45. →6.SDA5
21.→30.IN5_HD	46. →5.SCL5
22.→29.GND	47. →4.GND
23.→28.HYOUJI_X	48. →3.VCC_DOWN1
24.→27.GPC3	49. →2.PNP_WR
25.→26.GPC1	50. →1.NC

CN4003→CN6302

1.→50.GA4	26.→25.GND
2.→49.GND	27.→24.BB2
3.→48.GB4	28.→23.GND
4.→47.GND	29.→22.RA5
5.→46.GA3	30.→21.GND
6.→45.GND	31.→10.BB3
7.→44.GB5	32.→19.GND
8.→43.GND	33.→18.RA4
9.→42.GA2	34.→17.GND
10.→41.GND	35.→16.BB4
11.→40.GB6	36.→15.GND
12.→39.GND	37.→14.RA3
13.→38.GA1	38.→13.GND
14.→37.GND	39.→12.BB5
15.→39.GB7	40.→11.GND
16.→35.GND	41.→10.RA2
17.→34.GA0	42.→ 9.GND
18.→33.GND	43. →8.BB6
19.→32.BB0	44. →7.GND
20.→31.GND	45. →6.RA1
21.→30.RA7	46. →5.GND
22.→29.GND	47. →4.BB7
23.→28.BB1	48. →3.GND
24.→27.GND	49. →2.RA0
25.→26.RA6	50. →1.GND

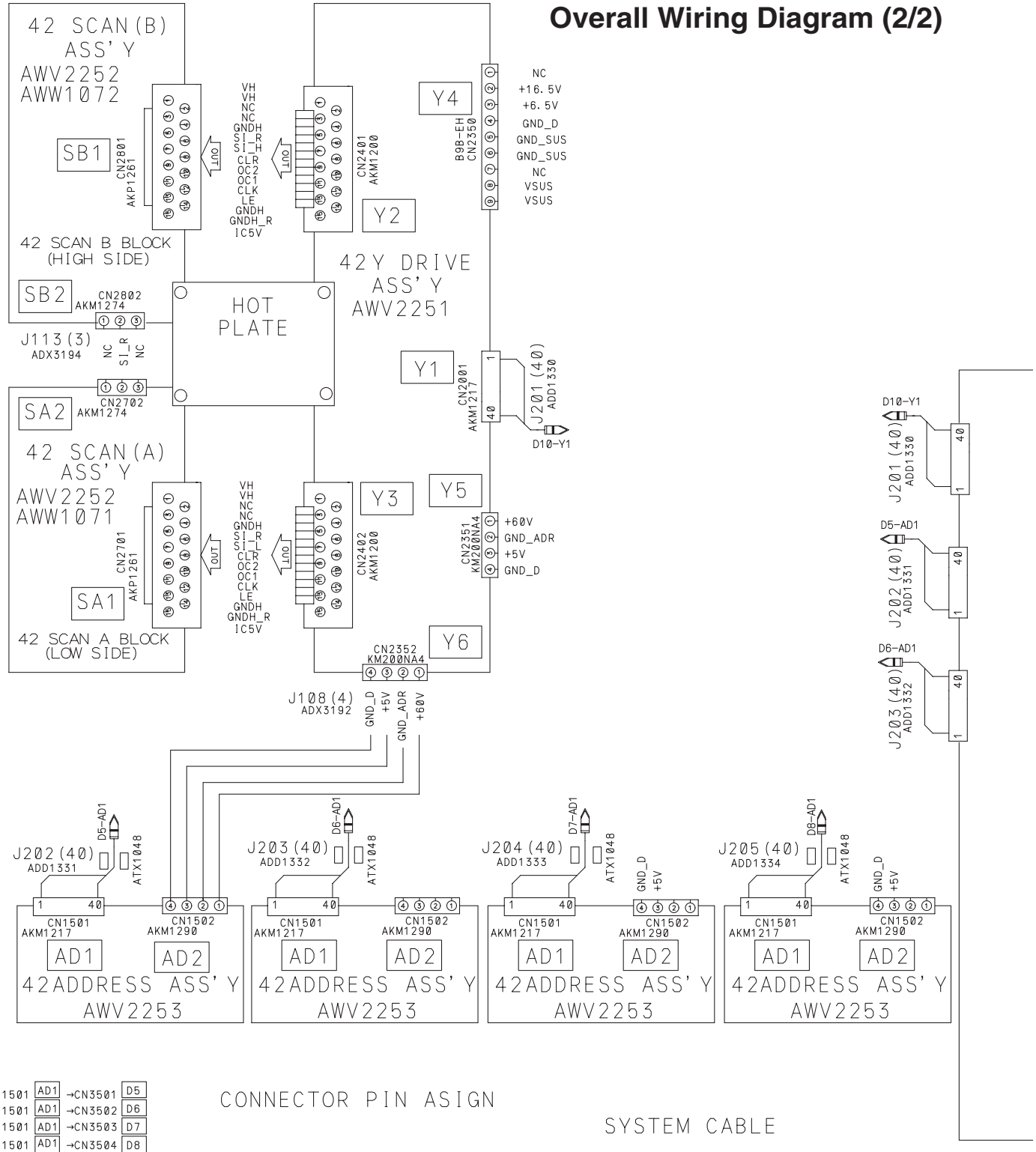
CN4002→CN6301

1.→50.VD	26.→25.RB5
2.→49.HD	27.→24.GND
3.→48.DE	28.→23.BA2
4.→47.CLK	29.→22.GND
5.→46.GND	30.→21.RB6
6.→45.RB0	31.→10.GND
7.→44.GND	32.→19.BA1
8.→43.BA7	33.→18.GND
9.→42.GND	34.→17.RB7
10.→41.RB1	35.→16.GND
11.→40.GND	36.→15.BA0
12.→39.BA6	37.→14.GND
13.→38.GND	38.→13.GB0
14.→37.RB2	39.→12.GND
15.→39.GND	40.→11.GB1
16.→35.BA5	41.→10.GND
17.→34.GND	42.→ 9.GB1
18.→33.RB3	43.→ 8.GND
19.→32.GND	44.→ 7.GA6
20.→31.BA4	45.→ 6.GND
21.→30.GND	46.→ 5.GB2.
22.→29.RB4	47. 4.GND
23.→28.GND	48.→ 3.GA5
24.→27.BA3	49.→ 2.GND
25.→26.GND	50.→ 1.GB3


TEMP-SENSOR1
SENB ASSY
AWW1102
TM2
CN1001
AKM1279
SCL5 GND VDD+3.3V SDA5 SCL5 GND VDD+3.3V SDA5
TEMP-SENSOR3
SEND ASSY
AWW1104
TM3
CN1201
AKM1279
ADX3267
ADX3271
ADX3276 (or ADX3289)
SW
CN9011
AKM1274
VDDM3
KEY
GND
AD2
CN8502
AKM1343
CN8501 AD1
AD1
CN8501
AKM1339
PM
POWER SUPPLY
AXY1127
PN
PV
PS
PA
P1
P2
P3
P4
P6
P7
ADX3263
ADX3264
ADX3265
ADX3286
ADX3270
ADX3278
ADX3196
ADX3292
ADX3199
ADX3198
PDP Md
AWV2251
Y4(CN2350)
AWV2250
X2(CN1201)
AWV2254
D2(CN3002)
D1(CN3001)
D11(CN3601)
AWV2253
(3/4)
AD2(CN1502)
AWV2253
(4/4)
AD2(CN1502)
AWV2253
(2/4)
AD2(CN1502)
AWV2251
Y4(CN2350)
CN4001 AKM1299
VIDEO SLOT IF ASSY
PDP-425CMX
AWW1101
PDP-42MXE10
AWW1113
CN4001
AUDIO ASSY
AWW1105
AU
PA
CN3004
AKM1280
CN3003
AKM1277
ROUT+ ROUT- LOUT+ LOUT-
SPEAKER_OUT
TEMP-SENSOR2
SENC ASSY
AWW1103
CN1101
AKM1275
TM4
ADX3284
ADX3285
AC INLET
AKP1296
AC
AC Switch
ASG1094
KEY ASSY
AWW1108
ADX3266
CN2201
S3B-EH

3.2 OVERALL CONNECTION DIAGRAM (2/2)

Overall Wiring Diagram (2/2)



CN1501 AD1 →CN3501 D5
CN1501 AD1 →CN3502 D6
CN1501 AD1 →CN3503 D7
CN1501 AD1 →CN3504 D8

CONNECTOR PIN ASIGN

SYSTEM CABLE

1 →40. GND_D	21→20. CN
2 →39. DIV0	22→19. NC
3 →38. DIV1	23→18. GND_D
4 →37. GND_D	24→17. NC
5 →36. +3.3V	25→16. BP
6 →35. +3.3V	26→15. BN
7 →34. GND_D	27→14. NC
8 →33. GND_D	28→13. GND_D
9 →32. NC	29→12. NC
10→31. DP	30→11. AP
11→30. DN	31→10. AN
12→29. NC	32→9. NC
13→28. GND_D	33→8. GND_D
14→27. NC	34→7. GND_D
15→26. CLKP	35→6. +8V
16→25. CLKN	36→5. +8V
17→24. NC	37→4. GND_D
18→23. GND_D	38→3. NC
19→22. NC	(CN3504のPSIZE)
20→21. CP	39→2. ADR_PD
	40→1. NC

CN3506 D10 →CN2001 Y1

1→40. GND_D	21→20. GND_D
2→39. SCN5V_PD	22→19. YSUS-MSK
3→38. SI_L	23→18. YNRST
4→37. SI_H	24→17. YRsv2
5→36. GND_D	25→16. GND_D
6→35. CLR	26→15. YNOFS
7→34. CLK	27→14. YRsv3
8→33. GND_D	28→13. YSOFT-D
9→32. LE	29→12. GND_D
10→31. OC2	30→11. VOFS_ADJ
11→30. OC1 (-1)	31→10. VYPRST_ADJ
12→29. GND_D	32→ 9. GND_D
13→28. YSUS-B	33→ 8. GND_D
14→27. YSUS-U	34→ 7. VADR_PD
15→26. GND_D	35→ 6. GND_D
16→25. YSUS-D	36→ 5. YDD_PD
17→24. YSUS-G	37→ 4. YSUS_PD
18→23. GND_D	38→ 3. SCAN_PD
19→22. YPR-U	39→ 2. YDRV_PD
20→21. YRsv1	40→ 1. PSW

CN3505 D9 →CN1001 X1

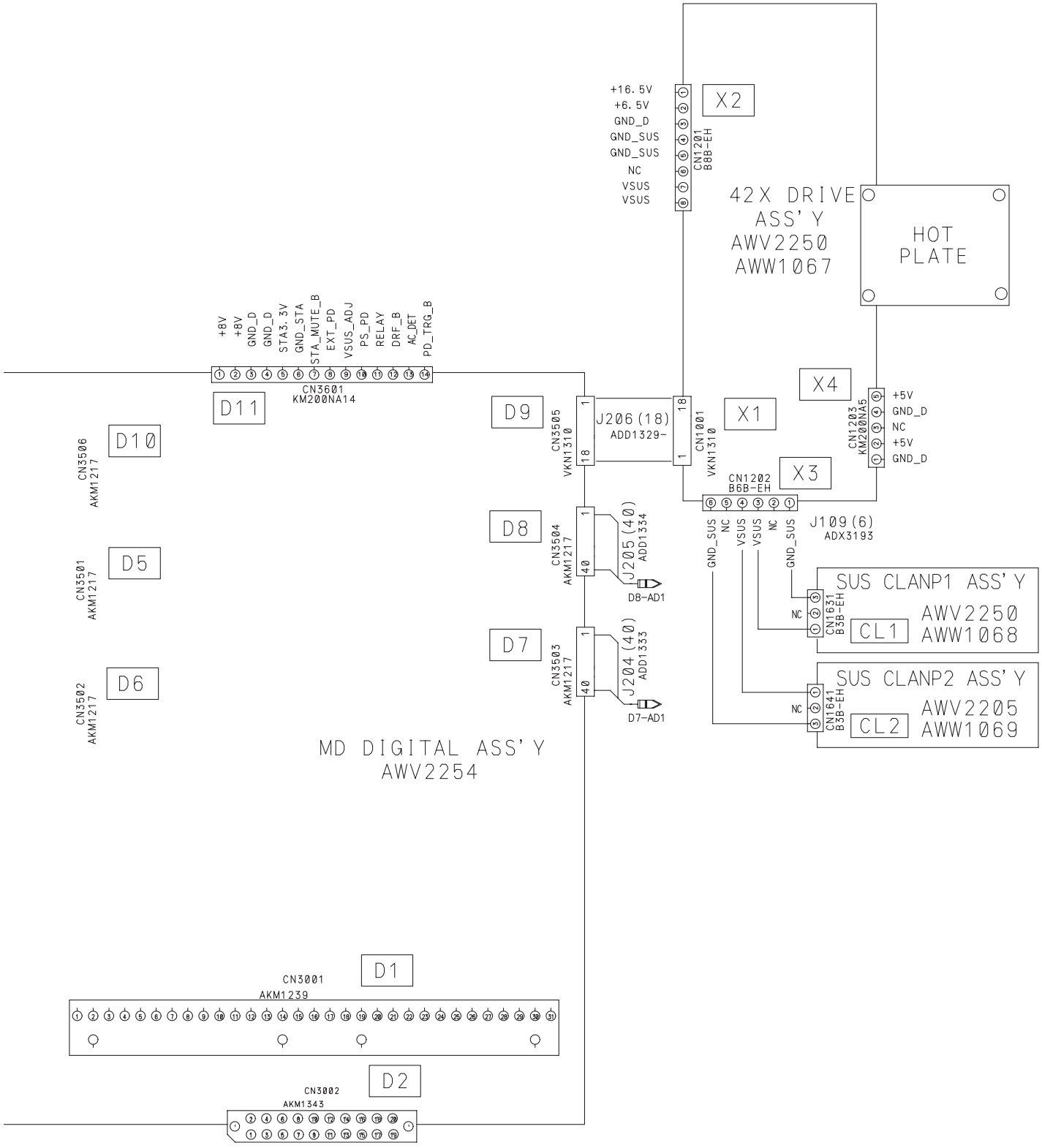
1→18. PSW	
2→17. XSUS_PD	
3→16. XDD_PD	
4→15. XDRV_PD	
5→14. GND_D	
6→13. XRsv1	
7→12. XSUS_MSK	
8→11. GND_D	
9→10. XNR-D	
10→ 9. GND_D	
11→ 8. XSUS-G	
12→ 7. GND_D	
13→ 6. XSUS-D	
14→ 5. GND_D	
15→ 4. XSUS-U	
16→ 3. GND_D	
17→ 2. XSUS-B	
18→ 1. GND_D	

JA3001 AKP1239

1. GND_D	17. A4M
2. GND_D	18. A3P
3. STATUS	19. A3M
4. SS	20. CLKP
5. STB_MT	21. CLKM
6. POWER	22. GND_D
7. MSEL	23. A2P
8. GND_D	24. A2M
9. A7P	25. A1P
10. A7M	26. A1M
11. A6P	27. AOP
12. A6M	28. AOM
13. A5P	29. GND_D
14. A5M	30. GND_D
15. GND_D	31. GND_D
16. A4P	

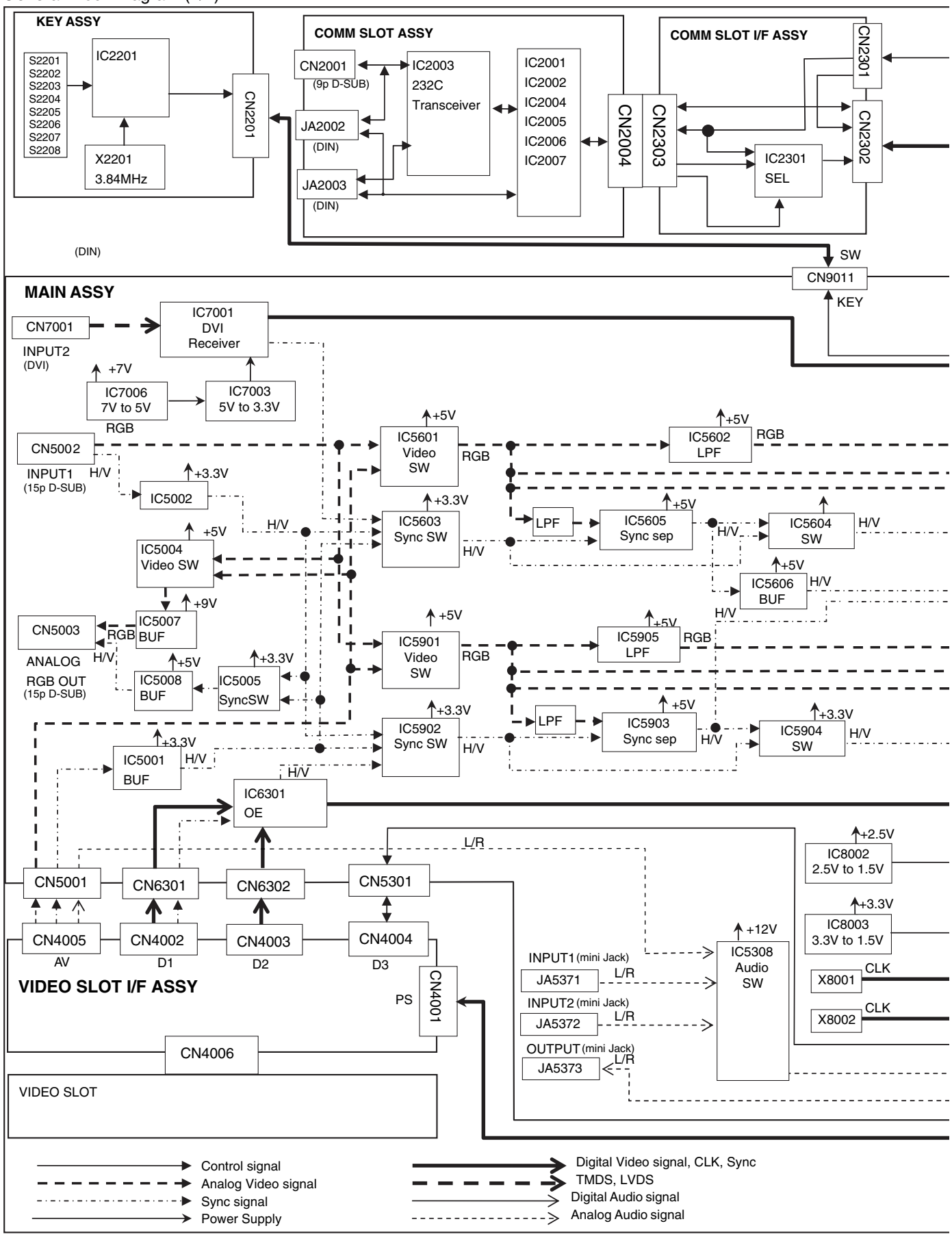
JA3002 AKM1343

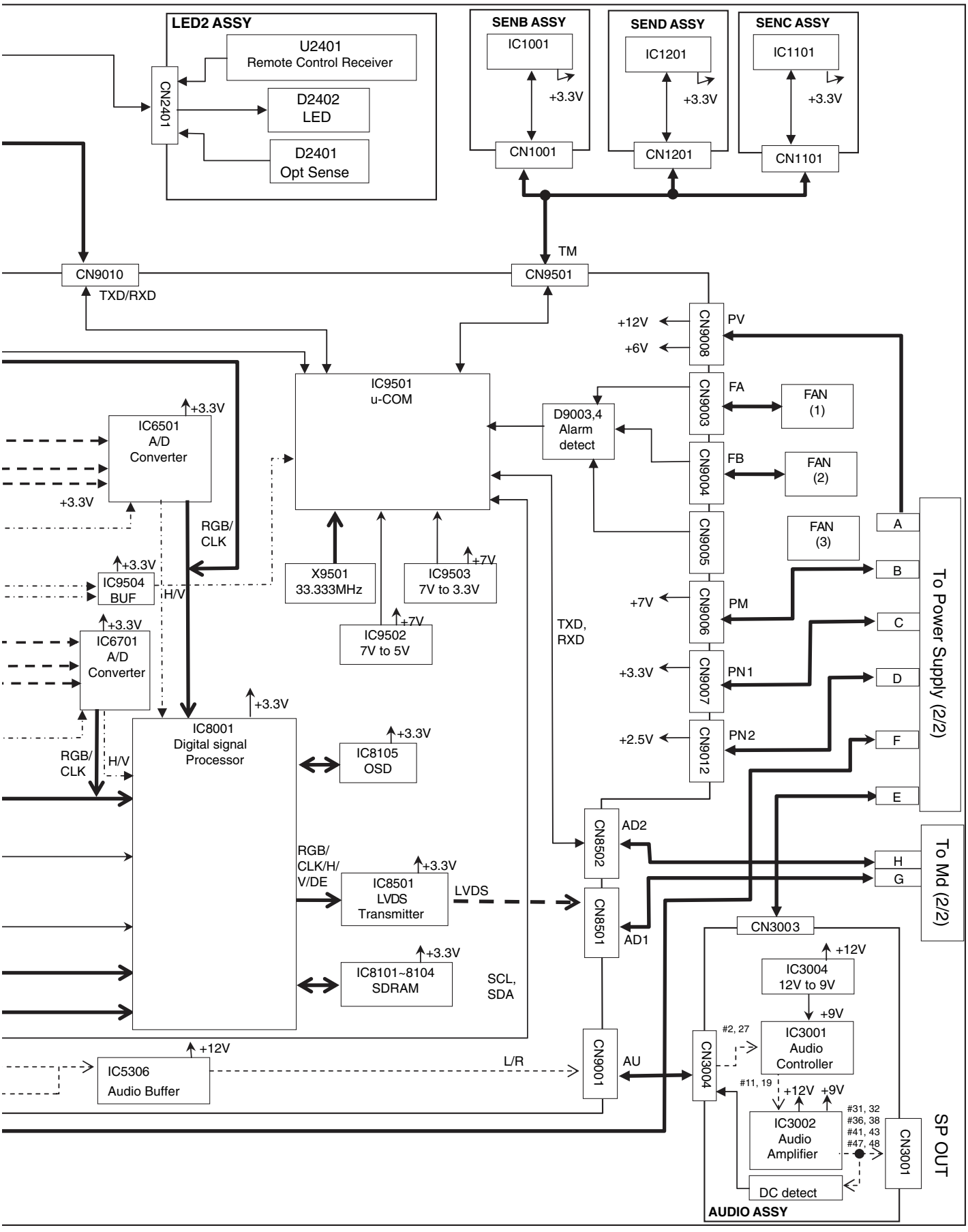
1. GND_D	
2. GND_D	
3. P_ST_B	
4. MR_ST_B	
5. NC	
6. MR_RXD	
7.	
8. AC. DET_B	
9. NC	
10. REQ	
11. NC	
12. MR_TXD	
13. NC	
14. STB_MUTE	
15. NC	
16. VIS	
17. NC	
18. FIELD	
19. GND_D	
20. GND_D	


+16.5V
+6.5V
GND_D
GND_SUS
GND_SUS
NC
VSUS
VSUS
X2
CN1201
B8B-EH
42X DRIVE
ASS'Y
AWV2250
AWW1067
HOT
PLATE
X4
X1
X3
CN1203
KM200NA5
+5V
GND_D
NC
+5V
GND_D
CN1202
B6B-EH
J109(6)
ADX3193
GND_SUS
NC
VSUS
VSUS
NC
GND_SUS
SUS CLANP1 ASS'Y
AWV2250
AWW1068
CL1
CN1631
B3B-EH
SUS CLANP2 ASS'Y
AWV2205
AWW1069
CL2
CN1641
B3B-EH
+8V
+8V
GND_D
GND_D
STA3.3V
GND_STA
STA_MUTE_B
EXT_PD
VSUS_ADJ
PS_PD
RELAY
DRF_B
AC_DET
PD_TRG_B
CN3601
KM200NA14
D11
D10
D9
D8
D7
D6
D5
D1
D2
CN3506
AKM1217
CN3501
AKM1217
CN3502
AKM1217
CN3505
VKN1310
CN3504
AKM1217
CN3503
AKM1217
CN1001
VKN1310
J206(18)
ADD1329-
J205(40)
ADD1334
D8-AD1
J204(40)
ADD1333
D7-AD1
CN3001
AKM1239
CN3002
AKM1343
MD DIGITAL ASS'Y
AWV2254

3.3 OVERALL BLOCK DIAGRAM (1/2)

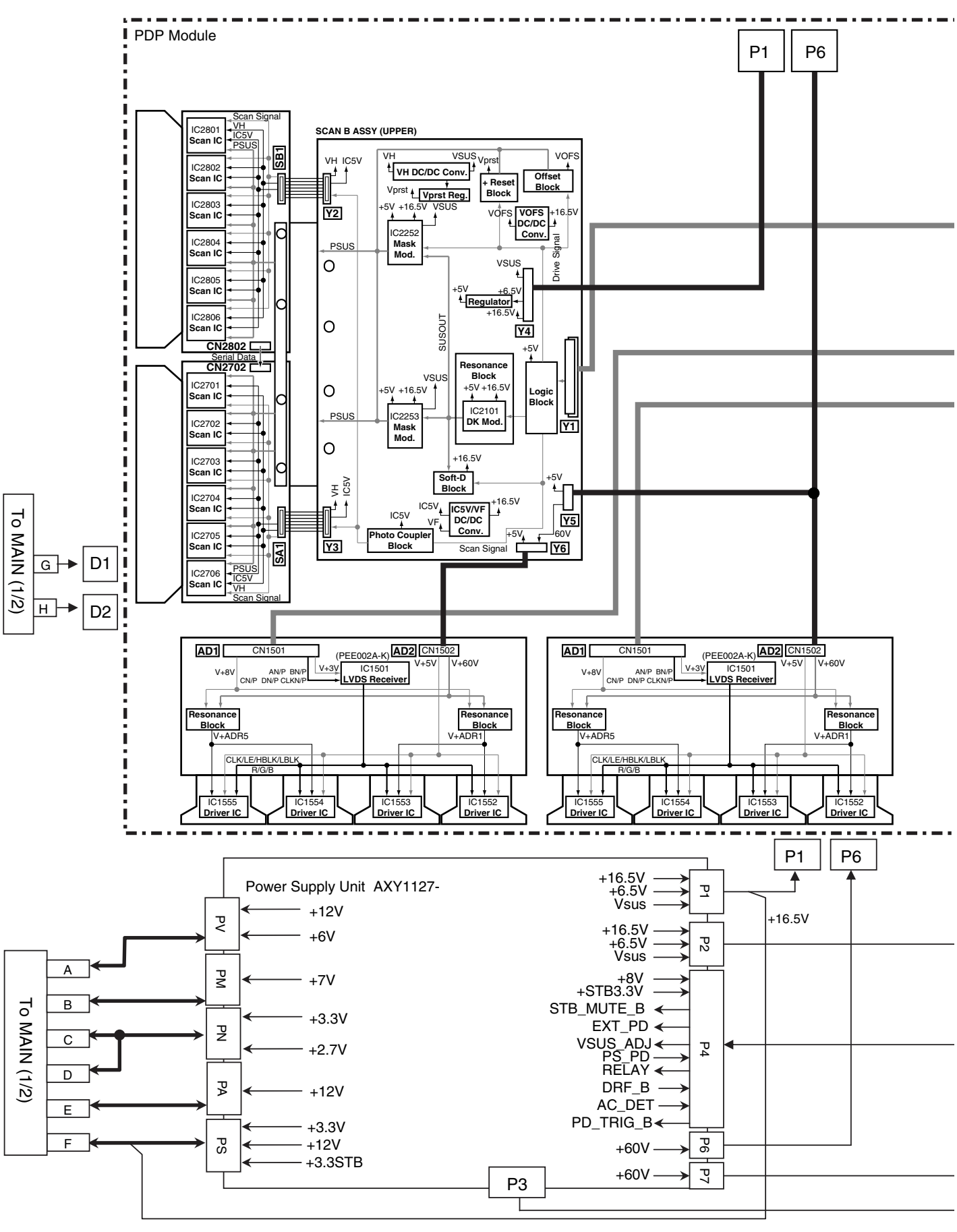
General Block Diagram (1/2)

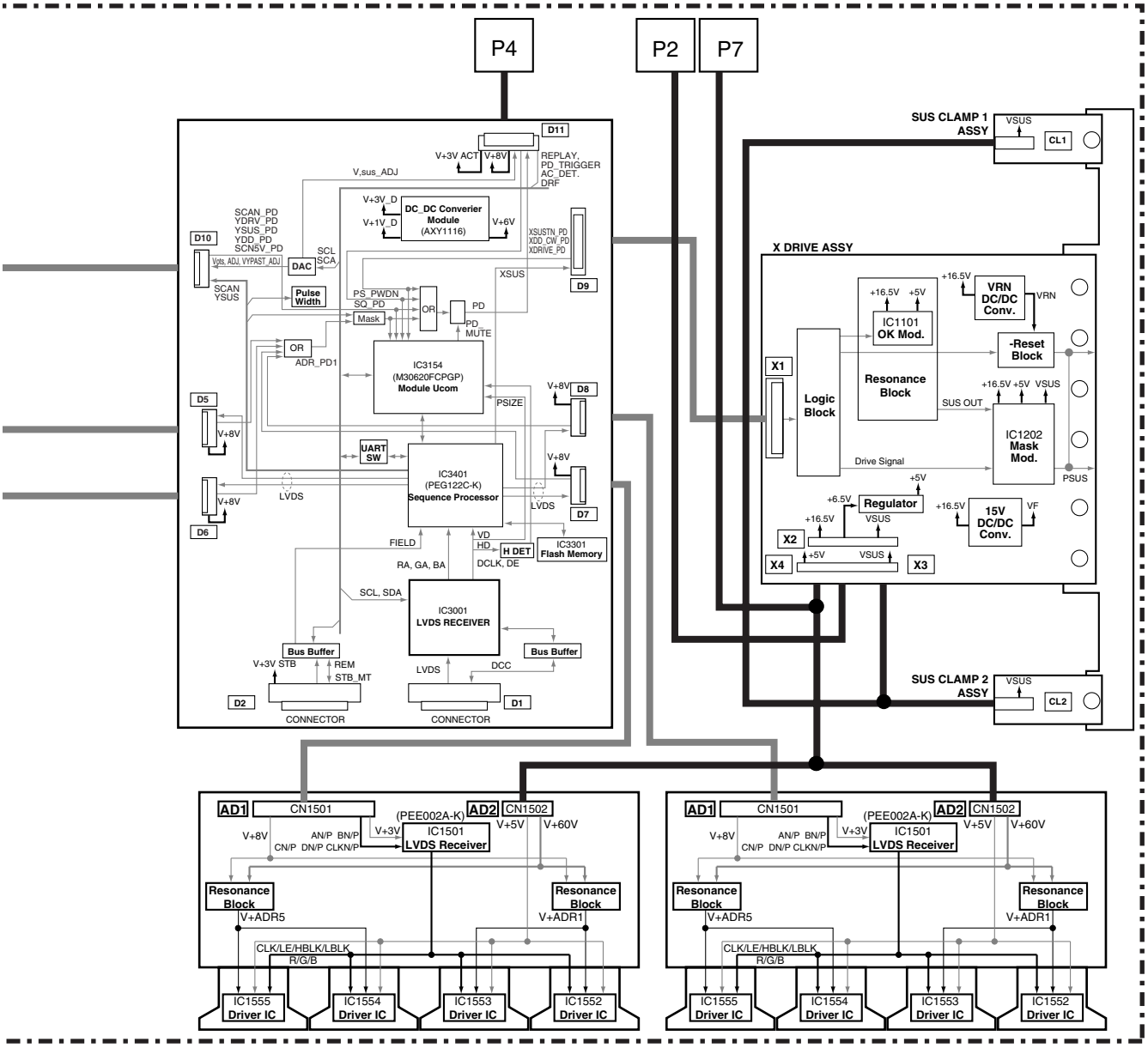



LED2 ASSY
U2401
Remote Control Receiver
CN2401
D2402
LED
D2401
Opt Sense
SENB ASSY
IC1001
+3.3V
CN1001
SEND ASSY
IC1201
+3.3V
CN1201
SENC ASSY
IC1101
+3.3V
CN1101
TM
CN9010
TXD/RXD
CN9501
IC9501
u-COM
+12V
+6V
CN9008
PV
CN9003
FA
FAN
(1)
CN9004
FB
FAN
(2)
CN9005
FAN
(3)
D9003,4
Alarm
detect
+3.3V
IC6501
A/D
Converter
+3.3V
RGB/
CLK
+3.3V
IC9504
BUF
H/V
X9501
33.333MHz
+7V
IC9503
7V to 3.3V
+7V
IC9502
7V to 5V
TXD,
RXD
+7V
CN9006
PM
+3.3V
CN9007
PN1
+2.5V
CN9012
PN2
A
B
C
D
F
E
To Power Supply (2/2)
+3.3V
IC6701
A/D
Converter
RGB/
CLK
H/V
+3.3V
IC8001
Digital signal
Processor
+3.3V
IC8105
OSD
CN8502
AD2
H
G
To Md (2/2)
RGB/
CLK/H/
V/DE
+3.3V
IC8501
LVDS
Transmitter
LVDS
CN8501
AD1
CN3003
+12V
IC3004
12V to 9V
+9V
#2, 27
IC3001
Audio
Controller
#11, 19
+12V
+9V
#31, 32
#36, 38
#41, 43
#47, 48
IC3002
Audio
Amplifier
DC detect
CN3001
SP OUT
+3.3V
IC8101~8104
SDRAM
SCL,
SDA
+12V
IC5306
Audio Buffer
L/R
CN9001
AU
CN3004
AUDIO ASSY

3.4 OVERALL BLOCK DIAGRAM (2/2)

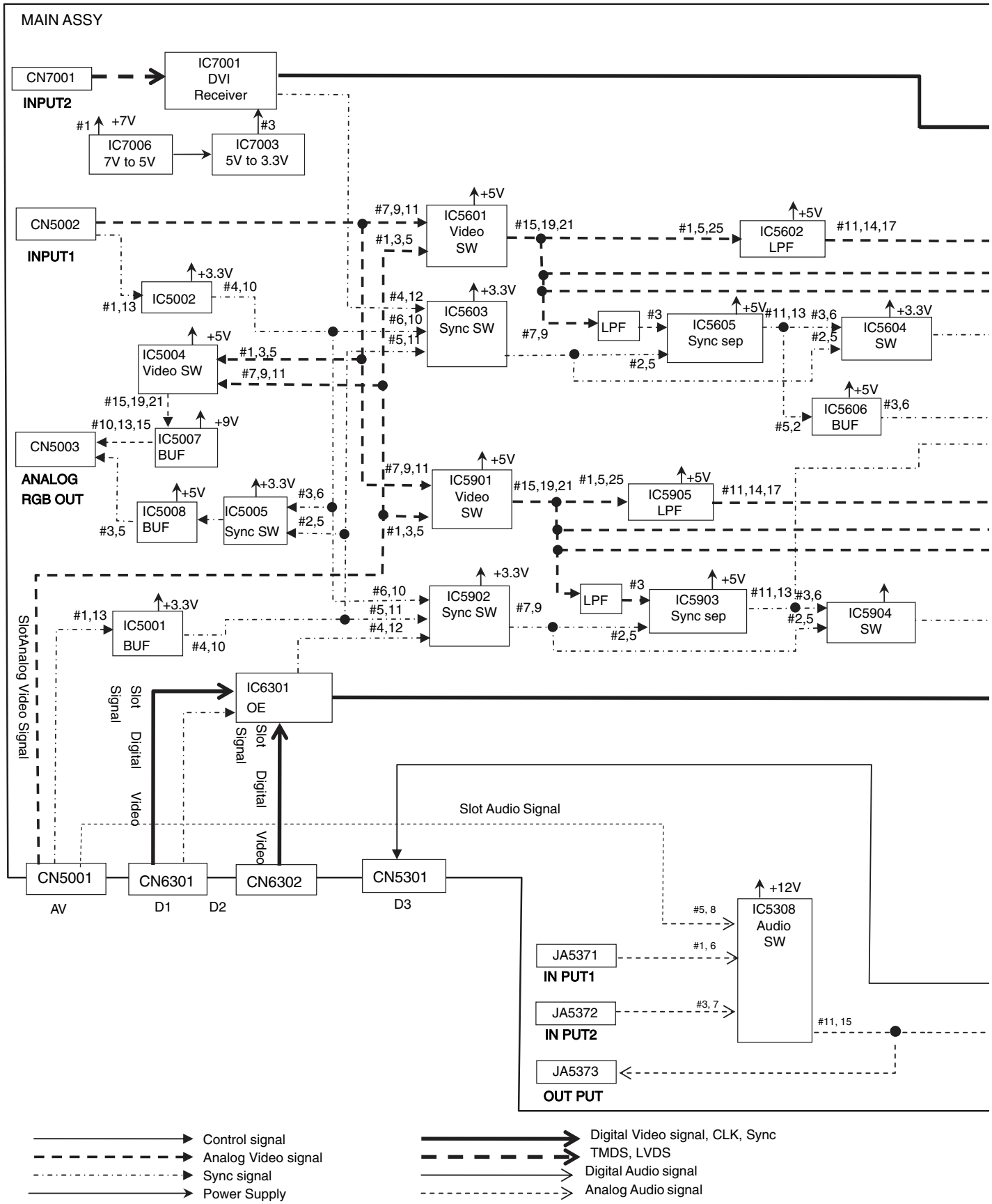
General Block Diagram (2/2)

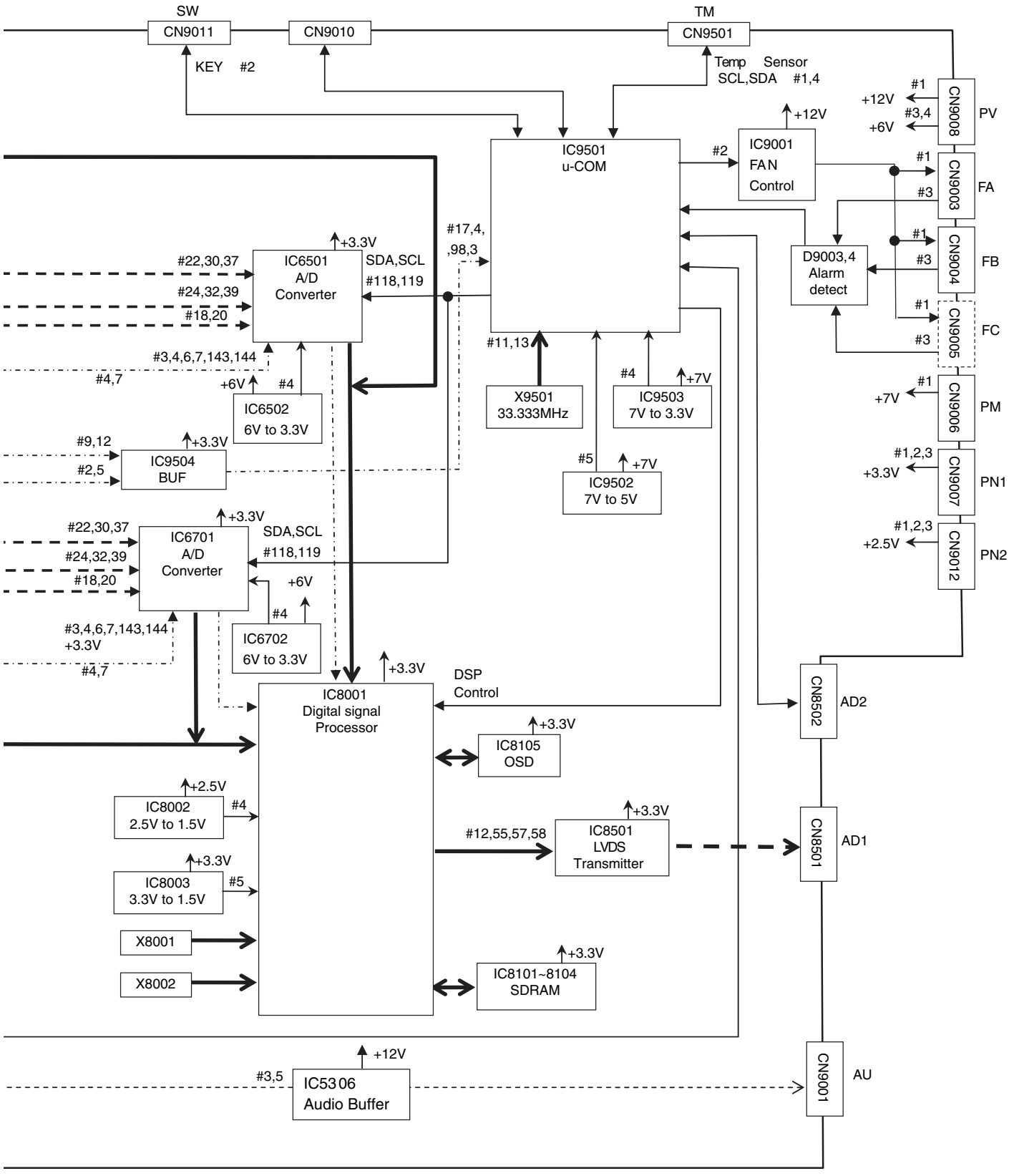



P4
P2
P7
D11
V+3V ACT
V+8V
REPLAY,
PD_TRIGGER
AC_DET.
DRF
V,sus_ADJ
V+3V_D
V+1V_D
DC_DC Converier Module (AXY1116)
V+6V
SCAN_PD
YDRV_PD
YSUS_PD
YDD_PD
SCN5V_PD
D10
Vpls, ADJ, VYPAST_ADJ
DAC
SCL
SCA
SCAN
YSUS
Pulse Width
XSUSTN_PD
XDD_CW_PD
XDRIVE_PD
XSUS
D9
PS_PWDN
SQ_PD
OR
PD
Mask
PD MUTE
OR
ADR_PD1
IC3154
(M30620FCPGP)
Module Ucom
PSIZE
V+8V
D8
D5
V+8V
UART SW
IC3401
(PEG122C-K)
Sequence Processor
V+8V
LVDS
LVDS
D7
V+8V
D6
FIELD
VD
HD
H DET
IC3301
Flash Memory
RA, GA, BA
DCLK, DE
SCL, SDA
IC3001
LVDS RECEIVER
Bus Buffer
Bus Buffer
V+3V STB
REM
STB_MT
LVDS
DCC
D2
D1
CONNECTOR
CONNECTOR
SUS CLAMP 1 ASSY
VSUS
CL1
X DRIVE ASSY
+16.5V
+5V
VRN DC/DC Conv.
VRN
IC1101
OK Mod.
-Reset Block
X1
Logic Block
Resonance Block
SUS OUT
+16.5V +5V VSUS
IC1202
Mask Mod.
Drive Signal
PSUS
+5V
+6.5V
Regulator
VSUS
+16.5V
15V DC/DC Conv.
VF
+16.5V
X2
+5V
VSUS
X4
X3
SUS CLAMP 2 ASSY
VSUS
CL2
AD1
CN1501
(PEE002A-K)
AD2
CN1502
V+8V
AN/P BN/P
CN/P DN/P CLKN/P
V+3V
IC1501
LVDS Receiver
V+5V
V+60V
Resonance Block
V+ADR5
Resonance Block
V+ADR1
CLK/LE/HBLK/LBLK
R/G/B
IC1555 Driver IC
IC1554 Driver IC
IC1553 Driver IC
IC1552 Driver IC
P4
P2
P7
POWER SW
AC INLET

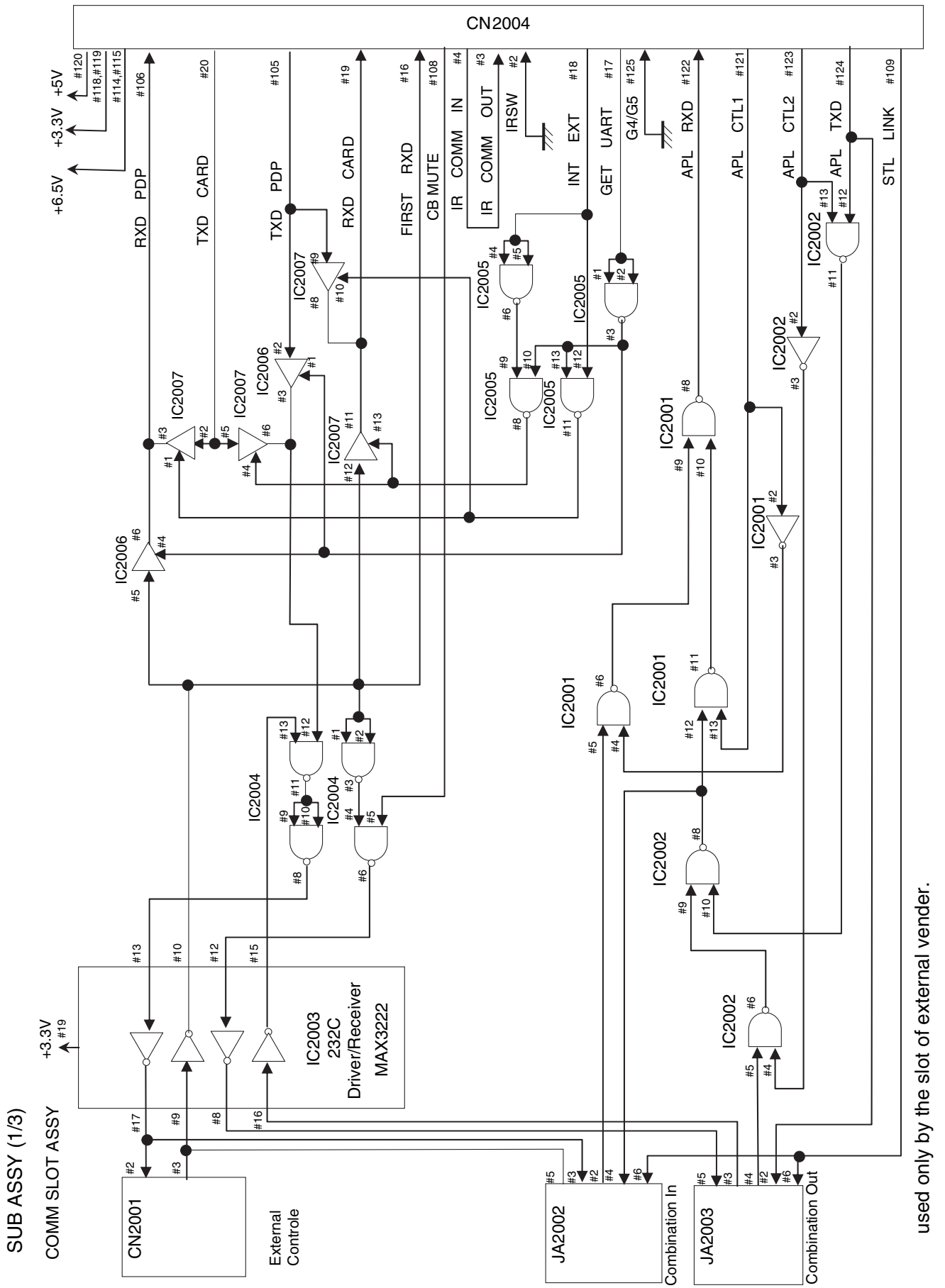
3.5 MAIN ASSY BLOCK DIAGRAM

Main Assy Block Diagram



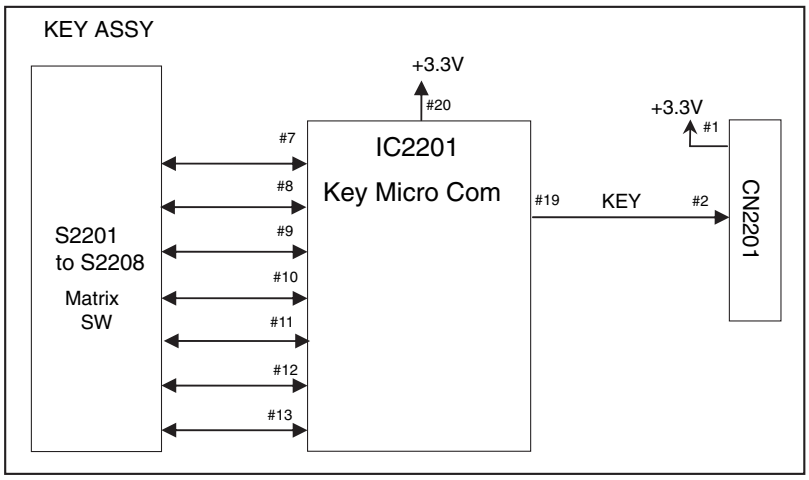

SW
CN9011
CN9010
TM
CN9501
KEY #2
Temp Sensor
SCL,SDA #1,4
IC9501
u-COM
IC9001
FAN
Control
+12V
#2
CN9008
PV
CN9003
FA
CN9004
FB
CN9005
FC
CN9006
PM
CN9007
PN1
CN9012
PN2
D9003,4
Alarm
detect
#17,4,
,98,3
#22,30,37
#24,32,39
#18,20
IC6501
A/D
Converter
+3.3V
SDA,SCL
#118,119
#3,4,6,7,143,144
#4,7
+6V
#4
IC6502
6V to 3.3V
#11,13
X9501
33.333MHz
IC9503
7V to 3.3V
+7V
#5
IC9502
7V to 5V
#9,12
#2,5
IC9504
BUF
IC6701
A/D
Converter
IC6702
6V to 3.3V
IC8001
Digital signal
Processor
DSP
Control
IC8105
OSD
IC8002
2.5V to 1.5V
+2.5V
IC8003
3.3V to 1.5V
#12,55,57,58
IC8501
LVDS
Transmitter
X8001
X8002
IC8101~8104
SDRAM
CN8502
AD2
CN8501
AD1
CN9001
AU
#3,5
IC5306
Audio Buffer

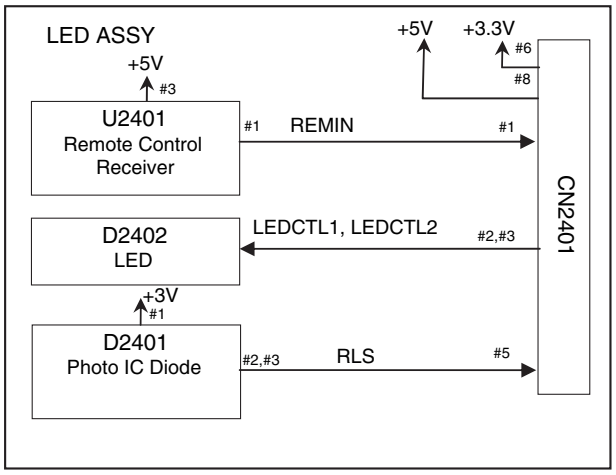
3.6 COMMON SLOT ASSY

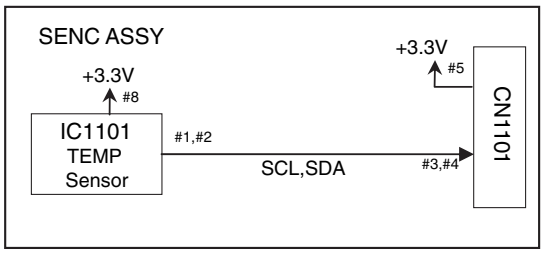


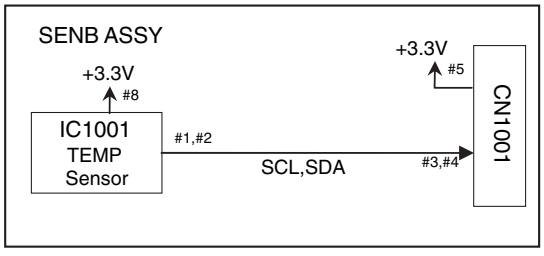
3.7 KEY, LED, SENB, SENC and SEND ASSYS

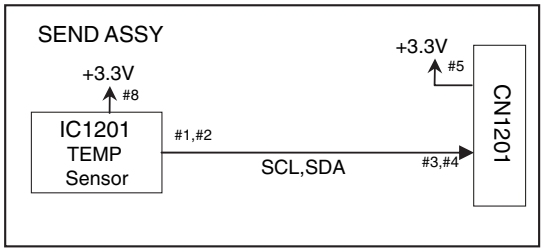
SUB ASSY (2/3)





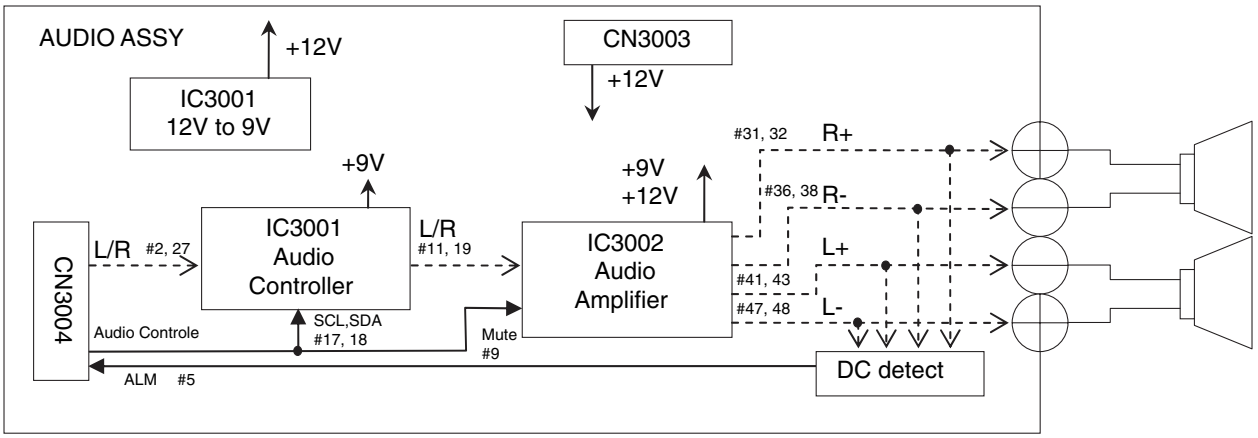


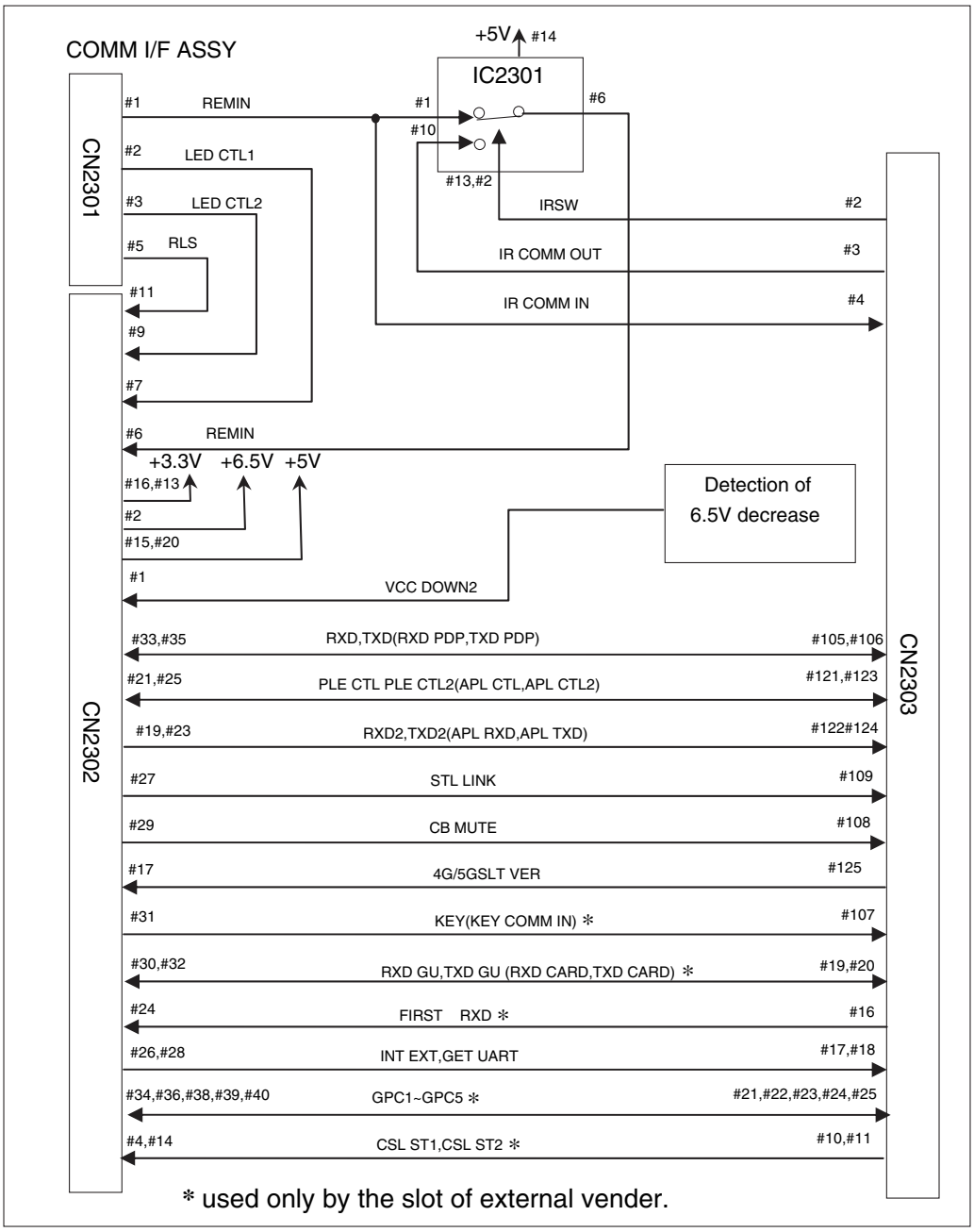




3.8 AUDIO and SUS COMM IF ASSYS

SUB ASSY (3/3)





A

B

C

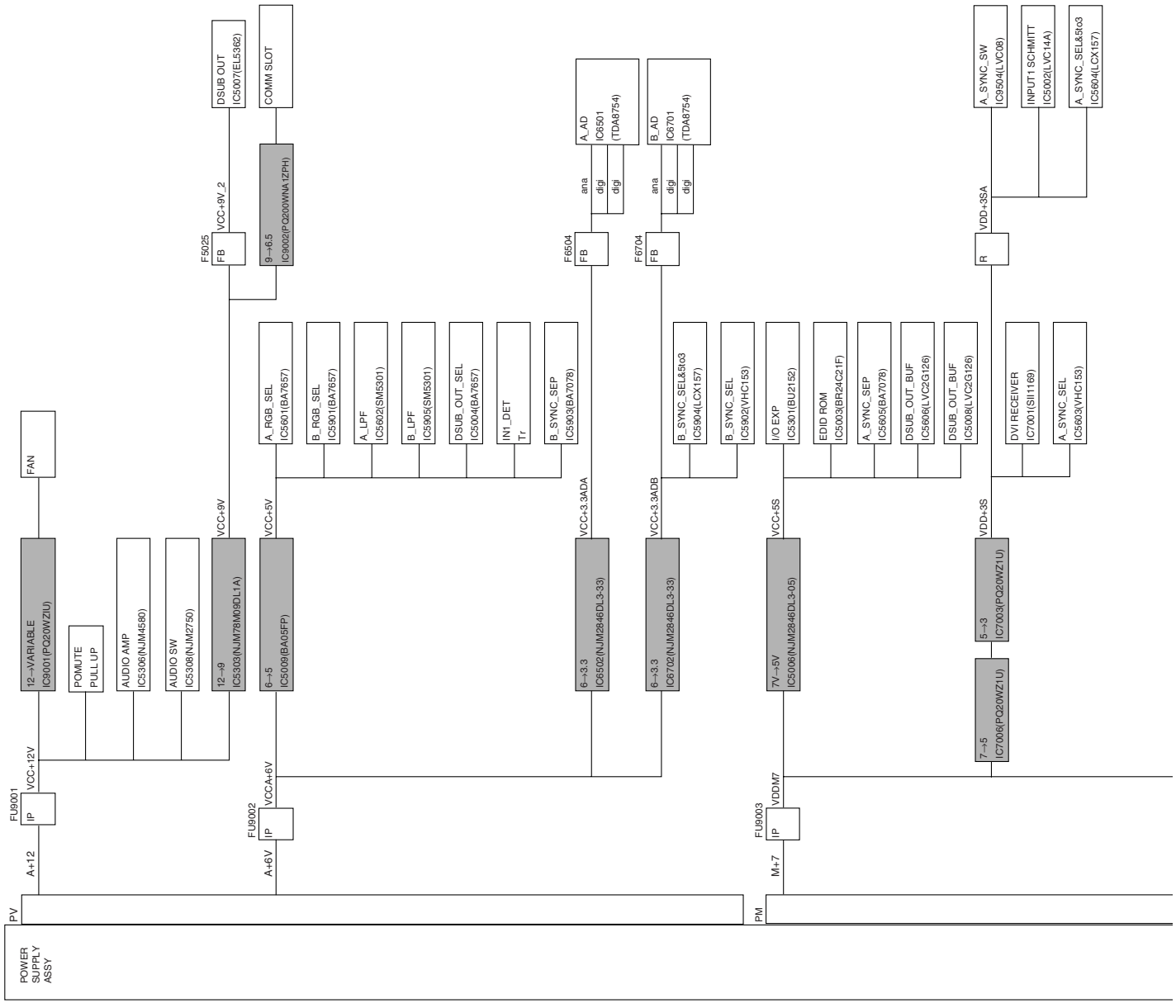
D

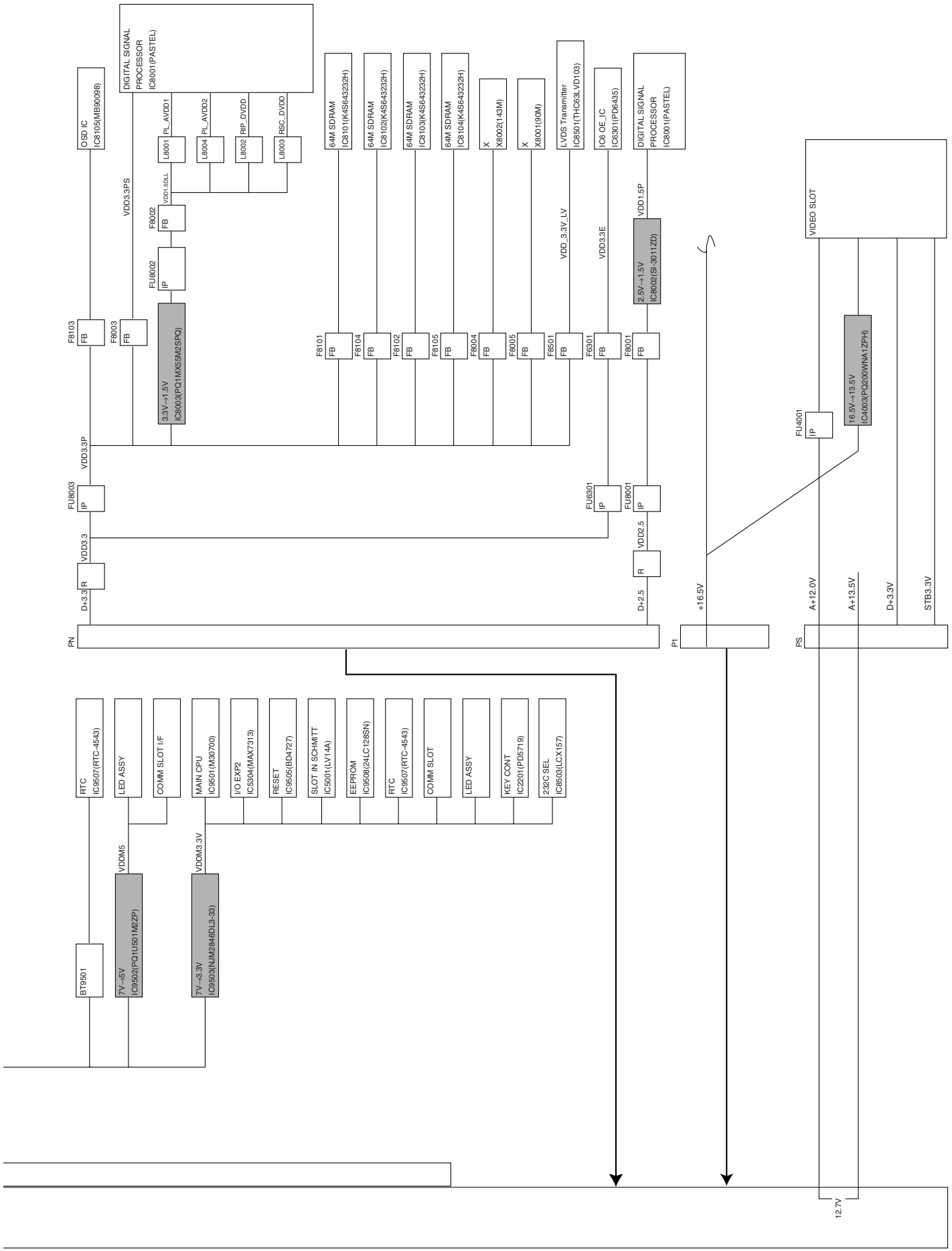
E

F

5 6 7 8

3.9 POWER BLOCK DIAGRAM




5
6
7
8
A
B
C
D
E
F
DIGITAL SIGNAL PROCESSOR IC8001(PASTEL)
OSD IC IC8105(MB90098)
PL_AVDD1
PL_AVDD2
RIP_DVDD
RSC_DVDD
L8001
L8004
L8002
L8003
VDD1.5DLL
F8002
FB
FU8002
IP
3.3V→1.5V IC8003(PQ1MX55M2SPQ)
VDD3.3PS
F8103
F8003
64M SDRAM IC8101(K4S643232H)
64M SDRAM IC8102(K4S643232H)
64M SDRAM IC8103(K4S643232H)
64M SDRAM IC8104(K4S643232H)
X X8002(143M)
X X8001(90M)
LVDS Transmitter IC8501(THC63LVD103)
IC6 OE_IC IC6301(PD6435)
DIGITAL SIGNAL PROCESSOR IC8001(PASTEL)
VDD_3.3V_LV
VDD3.3E
VDD1.5P
2.5V→1.5V IC8002(SI-3011ZD)
F8101
F8104
F8102
F8105
F8004
F8005
F8501
F6301
F8001
VDD3.3P
FU8003
FU6301
FU8001
IP
VDD3.3
VDD2.5
R
D+3.3
D+2.5
PN
VIDEO SLOT
FU4001
16.5V→13.5V IC4003(PQ200WNA1ZPH)
+16.5V
A+12.0V
A+13.5V
D+3.3V
STB3.3V
P1
PS
RTC IC9507(RTC-4543)
LED ASSY
COMM SLOT I/F
MAIN CPU IC9501(M30700)
I/O EXP2 IC5304(MAX7313)
RESET IC9505(BD4727)
SLOT IN SCHMITT IC5001(LV14A)
EEPROM IC9508(24LC128SN)
RTC IC9507(RTC-4543)
COMM SLOT
LED ASSY
KEY CONT IC2201(PD5719)
232C SEL IC8503(LCX157)
VDDM5
VDDM3.3V
BT9501
7V→5V IC9502(PQ1U501M2ZP)
7V→3.3V IC9503(NJM2846DL3-33)
12.7V

3.10 CONNECTOR PIN DESCRIPTION

(Caution)The operating voltages specified below are used in common inspective of the presence of signals. In this case, however, part of the oprating voltages(red characters)may change according to the signal conditions when the main power supply is turned on(POWER botton ON).
Status of LED lighting: ★ for lighting in Green, ★★ for unlighting, and ★★★ for lighting in red.

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
PN1 CN9007	1	D+3.3	3.3V power supply for digital circuits	MAIN	0	3.3	3.3	0	0	0	0	POWER→MAIN
	2	D+3.3	3.3V power supply for digital circuits	MAIN	0	3.3	3.3	0	0	0	0	POWER→MAIN
	3	D+3.3	3.3V power supply for digital circuits	MAIN	0	3.3	3.3	0	0	0	0	POWER→MAIN
	4	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	5	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	6	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
PN2 CN9012	1	D+2.5	2.5V power supply for digital circuits	MAIN	0	2.5	2.5	0	0	0	0	POWER→MAIN
	2	D+2.5	2.5V power supply for digital circuits	MAIN	0	2.5	2.5	0	0	0	0	POWER→MAIN
	3	D+2.5	2.5V power supply for digital circuits	MAIN	0	2.5	2.5	0	0	0	0	POWER→MAIN
	4	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	5	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	6	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	7	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
PN	12	D+3.3	3.3V power supply for digital circuits	PSU	0	3.3	3.3	0	0	0	0	POWER→MAIN
	11	D+3.3	3.3V power supply for digital circuits	PSU	0	3.3	3.3	0	0	0	0	POWER→MAIN
	10	D+3.3	3.3V power supply for digital circuits	PSU	0	3.3	3.3	0	0	0	0	POWER→MAIN
	9	D.GND	GND	PSU	0	0	0	0	0	0	0	-
	8	D.GND	GND	PSU	0	0	0	0	0	0	0	-
	7	D.GND	GND	PSU	0	0	0	0	0	0	0	-
	6	D+2.7	2.7V power supply for digital circuits	PSU	0	2.7	2.7	0	0	0	0	POWER→MAIN
	5	D+2.7	2.7V power supply for digital circuits	PSU	0	2.7	2.7	0	0	0	0	POWER→MAIN
	4	D+2.7	2.7V power supply for digital circuits	PSU	0	2.7	2.7	0	0	0	0	POWER→MAIN
	3	D.GND	GND	PSU	0	0	0	0	0	0	0	-
	2	D.GND	GND	PSU	0	0	0	0	0	0	0	-
	1	D.GND	GND	PSU	0	0	0	0	0	0	0	-
PM CN9006	1	M+7	7V power supply for microcomputer	MAIN	0	6.8	6.8	6.8	6.8	0	0	POWER→MAIN
	2	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	4	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	5	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	6	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	7	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
PM	7	M+7	7V power supply for microcomputer	PSU	0	7	7	7	7	0	0	POWER→MAIN
	6	D.GND	GND	PSU	0	0	0	0	0	0	0	-
	5	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
	4	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
	3	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
	2	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
	1	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
PV CN9008	1	A+12	12V power supply for analog circuits	MAIN	0	12	12	0	0	0	0	POWER→MAIN
	2	A.GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	A+6	6V power supply for analog circuits	MAIN	0	6	6	0	0	0	0	POWER→MAIN
	4	A+6	6V power supply for analog circuits	MAIN	0	6	6	0	0	0	0	POWER→MAIN
	5	A.GND	GND	MAIN	0	0	0	0	0	0	0	-
	6	A.GND	GND	MAIN	0	0	0	0	0	0	0	-
	7	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	8	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
PV	8	A+12	12V power supply for analog circuits	PSU	0	12	12	0	0	0	0	POWER→MAIN
	7	A.GND	GND	PSU	0	0	0	0	0	0	0	-
	6	A+6	6V power supply for analog circuits	PSU	0	6	6	0	0	0	0	POWER→MAIN
	5	A+6	6V power supply for analog circuits	PSU	0	6	6	0	0	0	0	POWER→MAIN
	4	A.GND	GND	PSU	0	0	0	0	0	0	0	-
	3	A.GND	GND	PSU	0	0	0	0	0	0	0	-
	2	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
	1	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
AU CN9001 CN3004	1	AU_L	Audio signal L CH		0	0	Selected input signals are output	0	0	0	0	MAIN→AUDIO
	2	GND	GND		0	0	0	0	0	0	0	-
	3	AU_R	Audio signal R CH		0	0	Selected input signals are output	0	0	0	0	MAIN→AUDIO
	4	GND	GND		0	0	0	0	0	0	0	-
	5	SP_ALM	Audio output alarm signal		0	3.3	3.3	3.3	3.3	0	0	AUDIO→MAIN
	6	GND	GND		0	0	0	0	0	0	0	-
	7	MUTE	Mute signal of audio output		0	0→4.5→9.0 4.5V (4 sec.) at power on.	0→4.5→9.0 4.5V (4 sec.) at power on.	0	0	0	0	MAIN→AUDIO
	8	SCL7	Clock line of the I2C bus		0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	0	0	0	MAIN→AUDIO
	9	SDA7	Data line of the I2C bus		0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	1	1	0	0	MAIN→AUDIO
TM CN9501	1	SCL5	Clock line of the I2C bus		0	clock signal use during data transmission (3.3Vac),3.3Vdc when no data are transmitted	clock signal use during data transmission (3.3Vac),3.3Vdc when no data are transmitted	0	0	0	0	MAIN→SENB
	2	GND	GND		0	0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	0	MAIN→SENB

Name	Pin No.	Pin name	Function	Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							"Signal direction (DR : Data Relay)"
				"AC power ON (Power cord connected to the wall outlet) ★★"	MAIN POWER "ON"★		"Power management ★★★ "	Standby ★★★	"Main power OFF ★★"	"AC Power OFF (Power cord pulled out of the wall outlet ★★"	
					No signal	With signal					
	4	SDA5	Data line of the I2C bus	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN←→SENB
TM2 CN1001	1	SCL5	Clock line of the I2C bus	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→SENB
	2	GND	GND	0	0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals	0	3.3	3.3	0	0	0	0	MAIN→SENB
	4	SDA5	Data line of the I2C bus	0	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	0	0	0	0	MAIN←→SENB
	5	SCL5	Clock line of the I2C bus	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SENB→SEND
	6	GND	GND	0	0	0	0	0	0	0	-
	7	VDD+3.3V	3.3V power supply for analog signals	0	3.3	3.3	0	0	0	0	SENB→SEND
	8	SDA5	Data line of the I2C bus	0	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	0	0	0	0	SENB←→SEND
TM3 CN1201	1	SCL5	Clock line of the I2C bus	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SENB→SEND
	2	GND	GND	0	0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals	0	3.3	3.3	0	0	0	0	SENB→SEND
	4	SDA5	Data line of the I2C bus	0	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	0	0	0	0	SENB←→SEND
	5	SCL5	Clock line of the I2C bus	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SEND→SENC
	6	GND	GND	0	0	0	0	0	0	0	-
	7	VDD+3.3V	3.3V power supply for analog signals	0	3.3	3.3	0	0	0	0	SEND→SENC
	8	SDA5	Data line of the I2C bus	0	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	0	0	0	0	SEND←→SENC
TM4 CN1101	1	SCL5	Clock line of the I2C bus	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SEND→SENC
	2	GND	GND	0	0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals	0	3.3	3.3	0	0	0	0	SEND→SENC
	4	SDA5	Data line of the I2C bus	0	During data exchange: Clock signal (3.3Vac),datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac),datano t exchanged: 3.3Vdc	0	0	0	0	SEND←→SENC
FA CN9003	1	FAN-CTL	Voltage- controllable power supply	0	11.6Vdc during high-speed revolition (Fan mode H) ; 8.8Vdc during medium speed revolition (Fan mode M) ; 6.0Vdc during low-speed revolition (Fan mode L) ;	11.6Vdc during high-speed revolition (Fan mode H) ;8.8Vdc during medium speed revolition (Fan mode M) ; 6.0Vdc during low-speed revolition (Fan mode L) ;	0	0	0	0	MAIN→FAN
	2	GND	GND	0	0	0	0	0	0	0	-
	3	F_ALM	Fan lock detect signal output	0	0V during normal Fan operation; 3.3Vdc while the fan is stopped	0V during normal Fan operation; 3.3Vdc while the fan is stopped	0	0	0	0	FAN→MAIN
FB CN9004	1	FAN-CTL	Voltage- controllable power supply	0	11.6Vdc during high-speed revolition (Fan mode H) ; 8.8Vdc during medium speed revolition (Fan mode M) ; 6.0Vdc during low-speed revolition (Fan mode L)	11.6Vdc during high-speed revolition (Fan mode H) ; 8.8Vdc during medium speed revolition (Fan mode M) ; 6.0Vdc during low-speed revolition (Fan mode L)	0	0	0	0	MAIN→FAN
	2	GND	GND	0	0	0	0	0	0	0	-

Name	Pin No.	Pin name	Function	Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							"Signal direction (DR : Data Relay)"
				"AC power ON (Power cord connected to the wall outlet) ★★"	MAIN POWER "ON" ★		"Power management ★★★"	Standby ★★★	"Main power OFF ★★"	"AC Power OFF (Power cord pulled out of the wall outlet ★★"	
					No signal	With signal					
	3	F_ALM	Fan lock detect signal output	0	0V during normal Fan operation; 3.3Vdc while the fan is stopped	0V during norma Fan operation; 3.3Vdc while the fan is stopped	0	0	0	0	FAN→MAIN
AD1 CN8501	1	GND	GND	0	0	0	0	0	0	0	-
	2	GND	GND	0	0	0	0	0	0	0	-
	3	GND	GND	0	0	0	0	0	0	0	-
	4	RE+	Video system output E+	0	Video mode LVDS serial differential E+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential E+ output 0.3Vac; Bias 1..25Vdc	0	0	0	0	MAIN→PDP
	5	RE-	Video system output E-	0	Video mode LVDS serial differential E- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential E- output 0.3Vac; Bias 1..25Vdc	0	0	0	0	MAIN→PDP
	6	RD+	Video system output D+	0	Video mode LVDS serial differential D+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential D+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	7	RD-	Video system output D-	0	Video mode LVDS serial differential D- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential D- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	8	RCLK+	Video system output clock+	0	Video data clock LVDS serial differential clock+ output 0.3Vac; Bias 1.25Vdc	Video data clock LVDS serial differential clock+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	9	RCLK-	Video system output clock-	0	Video data clock LVDS serial differential clock- output 0.3Vac; Bias 1.25Vdc	Video data clock LVDS serial differential clock- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	10	GND	GND	0	0	0	0	0	0	0	-
	11	RC+	Video system output C+	0	Video data LVDS serial differential C+ output 0.3Vac: Bias 1.25Vdc	Video data LVDS serial differential C+ output 0.3Vac: Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	12	RC-	Video system output C-	0	Video data LVDS serial differential C- output 0.3Vac: Bias 1.25Vdc	Video data LVDS serial differential C- output 0.3Vac: Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	13	RB+	Video system output B+	0	Video data LVDS serial differential B+ output 0Vac: Bias 1.1Vdc	Video data LVDS serial differential B+ output 0.3Vac: Bias 1..25Vdc	0	0	0	0	MAIN→PDP
	14	RB-	Video system output B-	0	Video data LVDS serial differential B- output 0Vac: Bias 1.4Vdc	Video data LVDS serial differential B- output 0.3Vac: Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	15	RA+	Video system output A+	0	Video data LVDS serial differential A+ output 0Vac: Bias 1.1Vdc	Video data LVDS serial differential A+ output 0.3Vac: Bias 1..25Vdc	0	0	0	0	MAIN→PDP
	16	RA-	Video system output A-	0	Video data LVDS serial differential A- output 0Vac: Bias 1.4Vdc	Video data LVDS serial differential A- output 0.3Vac: Bias 1.25Vdc	0	0	0	0	MAIN→PDP
	17	GND	GND	0	0	0	0	0	0	0	-
	18	NC	Non-connection termial	-	-	-	-	-	-	-	-
	19	NC	Non-connection termial	-	-	-	-	-	-	-	-
	20	NC	Non-connection termial	-	-	-	-	-	-	-	-
	21	NC	Non-connection termial	-	-	-	-	-	-	-	-
	22	NC	Non-connection termial	-	-	-	-	-	-	-	-
	23	NC	Non-connection termial	-	-	-	-	-	-	-	-
	24	GND	GND	0	0	0	0	0	0	0	-
	25	MSEL	Module function grade select signal	0	0	0	0	0	0	0	-
	26	POWER	POWER_ON_SIGNAL	0	3.3V	3.3V	3.3V	3.3V	0	0	
	27	STB_MUTE	Stand by power control signal	0	0	0	0	0	0	0	MAIN→PDP
	28	RFU	GND	0	0	0	0	0	0	0	-
	29	STATUS	Non-connection termial	-	-	-	-	-	-	-	-
	30	GND	GND	0	0	0	0	0	0	0	-
	31	GND	GND	0	0	0	0	0	0	0	-
	32	GND	GND	0	0	0	0	0	0	0	-
	33	GND	GND	0	0	0	0	0	0	0	-
AD2 CN8502	1	GND	GND	0	0	0	0	0	0	0	-
	2	GND	GND	0	0	0	0	0	0	0	-
	3	P_ST_B	Connecting detection (PDP→MAIN)	0	0	0	0	0	0	0	PDP→MAIN
	4	MR_ST_B	Connecting detection (MAIN→PDP)	0	0	0	0	0	0	0	MAIN→PDP
	6	MR_RXD	UART data (PDP→MAIN)	0	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	0	0	0	0	PDP→MAIN
	7	NC	Non-connection termial	-	-	-	-	-	-	-	-
	8	AC_DET_B	AC power detection from power supply	0	0	0	0	0	0	0	PDP→MAIN
	9	NC	Non-connection termial	-	-	-	-	-	-	-	-

Name	Pin No.	Pin name	Function	Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							"Signal direction (DR : Data Relay)"
				"AC power ON (Power cord connected to the wall outlet) ★★"	MAIN POWER "ON"★		"Power management ★★★ "	Standby ★★★	"Main power OFF ★★"	"AC Power OFF (Power cord pulled out of the wall outlet ★★ "	
					No signal	With signal					
	10	REQ	UART send request from PDP module	0	3.3Vdc when riquest signal is received; 0Vdc when no riquest signal is received.	3.3Vdc when riquest signal is received; 0Vdc when no riquest signal is received.	0	0	0	0	PDP→MAIN
	11	NC	Non-connection termial	-	-	-	-	-	-	-	-
	12	MR_TXD	UART data (MAIN→PDP)	0	Clock signal (3.3Vac) when data are received; 0Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 0Vdc when no data are received.	0	0	0	0	MAIN→PDP
	13	NC	Non-connection termial	-	-	-	-	-	-	-	-
	14	STB_MUTE	Stand by power control signal	0	0	0	4.7	4.7	0	0	MAIN→PDP
	15	NC	Non-connection termial	-	-	-	-	-	-	-	-
	16	ViS	reserve	0	0	0	0	0	0	0	MAIN→PDP
	17	NC	Non-connection termial	-	-	-	-	-	-	-	-
	18	FIELD	Adbanced cinema controle signal	0	0	0	0	0	0	0	MAIN→PDP
	19	GND	GND	0	0	0	0	0	0	0	-
	20	GND	GND	0	0	0	0	0	0	0	-
"SW	1	VDDM3		0	3.3	3.3	3.3	3.3	0	0	MAIN→KEY
CN9011 CN2201"	2	KEY	Key input detection	0	0.7~2.8Vdc When key inputs are enterd; 3.3Vdc when no key inputs are enterd.	0.7~2.8Vdc When key inputs are enterd; 3.3Vdc when no key inputs are enterd.	0.7~2.8Vdc When key inputs are enterd; 3.3Vdc when no key inputs are enterd.	0.7~2.8Vdc When key inputs are enterd; 3.3Vdc when no key inputs are enterd.	0	0	KEY→MAIN
	3	GND	GND	0	0	0	0	0	0	0	-
PA CN3003	1	S+12	12V power supply audio circuits MAIN	0	12.5	12.5	0	0	0	0	POWER→AUDIO
	2	S+1	12V power supply audio circuits MAIN	0	12.5	12.5	0	0	0	0	POWER→AUDIO
	3	S+12	12V power supply audio circuits MAIN	0	12.5	12.5	0	0	0	0	POWER→AUDIO
	4	GND	GND MAIN	0	0	0	0	0	0	0	-
	5	GND	GND MAIN	0	0	0	0	0	0	0	-
	6	GND	GND MAIN	0	0	0	0	0	0	0	-
PA	6	S+12	12V power supply audio circuits PSU	0	12.5	12.5	0	0	0	0	POWER→AUDIO
	5	S+12	12V power supply audio circuits PSU	0	12.5	12.5	0	0	0	0	POWER→AUDIO
	4	S+12	12V power supply audio circuits PSU	0	12.5	12.5	0	0	0	0	POWER→AUDIO
	3	GND	GND PSU	0	0	0	0	0	0	0	-
	2	GND	GND PSU	0	0	0	0	0	0	0	-
	1	GND	GND PSU	0	0	0	0	0	0	0	-
CN9010	1	VCC_DOWN2	6.5V voltage surveillance	0	"6.5V normal 3.3Vdc, 6.5V unusual 0Vdc"	"6.5V normal 3.3Vdc, 6.5V unusual 0Vdc"	0	0	0	0	COMM SLOT I/F→MAIN
CN2302	2	V+6.5V	6.5V power supply for analog circuits	0	6.5V	6.5V	0	0	0	0	MAIN→COMM SLOT I/F
	3	NC	Non-connection termial	-	-	-	-	-	-	-	-
	4	CSL_ST1	SLOT DETECT	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM SLOT I/F→MAIN
	5	NC	Non-connection termial	-	-	-	-	-	-	-	-
	6	REMIN	Infrared remote control data	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received;5Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	7	LEDCTL1	LED(RED)	0	0	0	5V	5V	0	0	MAIN→COMM SLOT I/F
	8	GND	GND	0	0	0	0	0	0	0	-
	9	LEDCTL2	LED(GREEN)	0	5V	5V	0	0	0	0	MAIN→COMM SLOT I/F
	10	CYOBL2	Non-connection termial	-	-	-	-	-	-	-	-
	11	RLS	Optical sensor	0	"Illumination 100lx 1Vdc Illumination 200lx 2Vdc"	"Illumination 100lx 1Vdc Illumination 200lx 2Vdc"	"Illumination 100lx 1Vdc Illumination 200lx 2Vdc"	"Illumination 100lx 1Vdc, Illumination 200lx 2Vdc"	0	0	COMM SLOT I/F→MAIN
	12	CYOBL1	Non-connection termial	-	-	-	-	-	-	-	-
	13	VDDM3.3V	3.3V power supply for microcomputer	0	3.3V	3.3V	3.3V	3.3V	0	0	MAIN→COMM SLOT I/F
	14	CSL_ST2	SLOT TYPE DETECT	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM SLOT I/F→MAIN
	15	VDDM5	5V power supply for microcomputer	0	5V	5V	5V	5V	0	0	MAIN→COMM SLOT I/F
	16	VDDM3.3V	3.3V power supply for microcomputer	0	3.3V	3.3V	3.3V	3.3V	0	0	MAIN→COMM SLOT I/F
	17	4G/5G	Generation information	0	0	0	0	0	0	0	COMM SLOT I/F→MAIN
	18	GND	GND	0	0	0	0	0	0	0	-
	19	TXD2	PLE LINK	0	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	0	0	MAIN→COMM SLOT I/F
	20	VDDM5	5V power supply for microcompute	0	5V	5V	5V	5V	0	0	MAIN→COMM SLOT I/F
	21	PLE_CTL2	PLE LINK process select	0	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	0	0	0	MAIN→COMM SLOT I/F
	22	GND	GND	0	0	0	0	0	0	0	-
	23	RXD2	PLE LINK	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	24	FIRST_RXD	RXD signal (to V-CARD's micro_COM only)	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN

Name	Pin No.	Pin name	Function	Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							"Signal direction (DR : Data Relay)"
				"AC power ON (Power cord connected to the wall outlet) ★★"	MAIN POWER "ON" ★		"Power management ★★★ "	Standby ★★★	"Main power OFF ★★"	"AC Power OFF (Power cord pulled out of the wall outlet ★★"	
					No signal	With signal					
	25	PLE_CTL	PLE LINK process select	0	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	0	0	0	MAIN COMM SLOT I/F
	26	GET_UART	U-ART process select	0	3.3Vdc::232C connector⇔ PDP, 0V: 232Cconnecto ⇔VIDEO: CARD, PDP⇔VIDEO CARD	3.3Vdc::232C connector⇔ PDP, 0V: 232Cconnecto ⇔VIDEO CARD, PDP⇔VIDEO CARD	3.3Vdc::232C connector⇔ PDP, 0V: 232Cconnecto ⇔VIDEO CARD, PDP⇔VIDEO CARD	3.3Vdc::232C connector⇔ PDP, 0V: 232Cconnecto ⇔VIDEO CARD, PDP⇔VIDEO CARD	0	0	MAIN→COMM SLOT I/F
	27	STL_LINK	The signal for still picture detection linkage operation	0	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	0	0	MAIN→COMM SLOT I/F
	28	INT_EXT	U-ARTÂ in/out Select	0	0V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0	0	MAIN→COMM SLOT I/F
	29	CB_MUTE	COMBINATION MUTEÂ signal	0	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	0	0	MAIN→COMM SLOT I/F
	30	RXD_GU	RXD signal(by GET_UART)	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	31	KEY	KEY SCAN Signal	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→COMM SLOT I/F
	32	TXD_GU	TXD Signal(by GET_UART)	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	MAIN→COMM SLOT I/F
	33	RXD	RXD Siganal(to PDPÂfs micro_COM)	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	34	GPC5	COMM CARD-VIDEO CARD I/F	0	0	0	0	0	0	0	MAIN←→OMM SLOT I/F
	35	TXD	TXD signal (from PDP's micro_COM)	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	MAIN→COMM SLOT I/F
	36	GPC4	COMM CARD-VIDEO CARDÂ Exclusive communication line	0	0	0	0	0	0	0	MAIN←→OMM SLOT I/F
	37	GND	GND	0	0	0	0	0	0	0	-
	38	GPC3	COMM CARD-VIDEO CARDÂ Exclusive communication line	0	0	0	0	0	0	0	MAIN←→OMM SLOT I/F
	39	GPC1	COMM CARD-VIDEO CARDÂ Exclusive communication line	0	0	0	0	0	0	0	MAIN←→OMM SLOT I/F
	40	GPC2	COMM CARD-VIDEO CARDÂ Exclusive communication line	0	0	0	0	0	0	0	MAIN←→OMM SLOT I/F
CN2303	1	NC	Non-connection termial	-	-	-	-	-	-	-	-
CN2004	2	IRSW	IR signa process select	0	5V	5V	5V	5V	0	0	COMM CARD→COMM SLOT I/F
	3	IR_COMM_OUT	Infrared remote control data output (to PDP's micro_COM)	0	Clock signal (4Vac) when data are received; 5Vdc when no data are received.	Clock signal (4Vac) when data are received; 5Vdc when no data are received.	Clock signal (4Vac) when data are received; 5Vdc when no data are received.	Clock signal (4Vac) when data are received; 5Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	4	IR_COMM_IN	Infrared remote control data input (from IR)	0	clock signal used duaring data transmission (4Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (4Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (4Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (4Vac), 5Vdc when no data are transmitted.	0	0	COMM SLOT I/F→COMM CARD
	5	GND	GND	0	0	0	0	0	0	0	-
	6	GND	GND	0	0	0	0	0	0	0	-
	7	GND	GND	0	0	0	0	0	0	0	-
	8	CYOBI3	Non-connection termial	-	-	-	-	-	-	-	-
	9	CYOBI2	Non-connection termial	-	-	-	-	-	-	-	-
	10	CSL_ST2	SLOT TYPE DETECT	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM CARD→COMM SLOT I/F
	11	CSL_ST1	SLOT DETECT	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM CARD→COMM SLOT I/F
	14	GND	GND	0	0	0	0	0	0	0	-
	15	GND	GND	0	0	0	0	0	0	0	-
	16	FIRST_RXD	"RXD⇔signal (to V-CARD's micro_COM only)	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	17	GET_UART	U-ART PROCESSÂ SELECT	0	V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0V:232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0	0	COMM SLOT I/F→COMM CARD

Name	Pin No.	Pin name	Function	Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)						"Signal direction (DR : Data Relay)"
				"AC power ON (Power cord connected to the wall outlet) ★★"	MAIN POWER "ON"★		"Power management ★★★ "	Standby ★★★	"Main power OFF ★★"	"AC Power OFF (Power cord pulled out of the wall outlet ★★"	
					No signal	With signal					
	18	INT_EXT	U-ART in/out Select	0	0V::232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0V::232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0V::232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0V::232C connector⇔ VIDEO CARD, 3.3Vdc: PDP⇔VIDEO CARD	0	0	COMM SLOT I/F→COMM CARD
	19	RXD_CARD	RXD signal(by GET_UART)	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signa l used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	20	TXD_CARD	TXD signal(by GET_UART)	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	COMM SLOT I/F→COMM CARD
	21	GPC5	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F←→COMM CARD
	22	GPC4	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F←→COMM CARD
	23	GPC3	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F←→COMM CARD
	24	GPC2	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F←→COMM CARD
	25	GPC1	COMM CARD-VIDEO CARD Exclusive communication line	-	0	0	0	0	0	0	COMM SLOT I/F←→COMM CARD
	101	NC	Non-connection termial	0	-	-	-	-	-	-	-
	102	GND	GND	0	0	0	0	0	0	0	-
	103	GND	GND	0	0	0	0	0	0	0	-
	104	GND	GND	0	0	0	0	0	0	0	-
	105	TXD_PDP	TXD signal (from PDPÅfs micro_COM)	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	COMM SLOT I/F→COMM CARD
	106	RXD_PDP	RXD signal (to PDPÅfs micro_COM)	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signa l used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	107	KEY_ COMM_IN	KEY SCAN signal	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	COMM SLOT I/F→COMM CARD
	108	CB_MUTE	COMBINATION MUTE signal	0	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	0	0	COMM SLOT I/F→COMM CARD
	109	STL_LINK	The signal for still picture detection linkage operation	0	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	0	0	COMM SLOT I/F←→COMM CARD
	110	GND	GND	0	0	0	0	0	0	0	-
	111	GND	GND	0	0	0	0	0	0	0	-
	114	V+6.5V	6.5V power supply for analog circuits	0	6.5V	6.5V	0	0	0	0	COMM SLOT I/F→COMM CARD
	115	V+6.5V	6.5V power supply for analog circuits	0	6.5V	6.5V	0	0	0	0	COMM SLOT I/F→COMM CARD
	116	GND	GND	0	0	0	0	0	0	0	-
	117	GND	GND	0	0	0	0	0	0	0	-
	118	VDDM3.3V	3.3V power supply for microcomputer	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM SLOT I/F→COMM CARD
	119	VDDM3.3V	3.3V power supply for microcomputer	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM SLOT I/F→COMM CARD
	120	VDDM5V	5V power supply for microcomputer	0	5V	5V	5V	5V	0	0	COMM SLOT I/F→COMM CARD
	121	APL_CTL1	PLE LINK process select	0	High output 3.3Vdc Low, output 0Vdc	High output 3.3Vdc Low, output 0Vdc	High output 3.3Vdc Low, output 0Vdc	0	0	0	COMM SLOT I/F→COMM CARD
	122	APL_RXD	PLE LINK	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	123	APL_CTL2	PLE LINK process select	0	High output 3.3Vdc Low output 0Vdc	High output 3.3Vdc Low output 0Vdc	High output 3.3Vdc Low output 0Vdc	0	0	0	COMM SLOT I/F→COMM CARD
	124	APL_TXD	PLE LINK	0	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used duaring data transmission (5Vac), 5Vdc when no data are transmitted.	0	0	COMM SLOT I/F→COMM CARD
	125	SLT_Ver	Generation information	0	0	0	0	0	0	0	COMM CARD→ COMM SLOT I/F
CN2301 CN2401	1	REMIN	Infrared remote control data	0	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0	0	LED2→COMM SLOT I/F
	2	LEDCTL1	LED(RED)	0	0	0	5V	5V	0	0	COMM SLOT I/F→LED2
	3	LEDCTL2	LED(GREEN)	0	5V	5V	0	0	0	0	COMM SLOT I/F→LED2
	4	GND	GND	0	0	0	0	0	0	0	-
	5	RLS	Optical sensor	0	Illumination 100lx 1Vdc, Illumination 200lx 2Vdc"	Illumination 100lx 1Vdc, Illumination 200lx 2Vdc"	Illumination 100lx 1Vdc, Illumination 200lx 2Vdc"	Illumination 100lx 1Vdc, Illumination 200lx 2Vdc"	0	0	LED2→COMM SLOT I/F

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	6	VDDM3.3V	3.3V power supply for microcomputer			3.3V	3.3V	3.3V	3.3V	0	0	COMM SLOT I/F→LED2
	7	GND	GND		0	0	0	0	0	0	0	-
	8	VDDM5V	5V power supply for microcomputer		0	5V	5V	5V	5V	0	0	COMM SLOT I/F→LED2
AV CN5001	1	SLOT_VD	VD for ANALOG SYNC	MAIN	0	Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	VIDEO SLOT I/F→MAIN
	2	GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	GND	GND	MAIN	0	0	0	0	0	0	0	-
	4	AUDIO_L	AUDIO L ch	MAIN	0	0	Audio signal of SLOT	0	0	0	0	VIDEO SLOT I/F→MAIN
	5	SLOT_HD	HD for ANALOG SYNC	MAIN	0	0	Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	VIDEO SLOT I/F→MAIN
	6	GND	GND	MAIN	0	0	0	0	0	0	0	-
	7	GND	GND	MAIN	0	0	0	0	0	0	0	-
	8	AUDIO_R	AUDIO R ch	MAIN	0	0	Audio signal of SLOT	0	0	0	0	VIDEO SLOT I/F→MAIN
	9	R(R-Y)	RED(Cr or Pr) for ANALOG	MAIN	0	0	Video signal 0.7Vp-p	0	0	0	0	VIDEO SLOT I/F→MAIN
	10	GND	GND	MAIN	0	0	0	0	0	0	0	-
	11	GND	GND	MAIN	0	0	0	0	0	0	0	-
	12	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	13	B(B-Y)	BLUE(Cb or Pb) for ANALOG	MAIN	0	0	Video signal 0.7Vp-p	0	0	0	0	VIDEO SLOT I/F→MAIN
	14	GND	GND	MAIN	0	0	0	0	0	0	0	-
	15	GND	GND	MAIN	0	0	0	0	0	0	0	-
	16	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	17	Y(G)ON_ SYNC	GREEN(Y) for ANALOG(on Sync)	MAIN	0	0	Video signal 0.7~1.0Vp-p	0	0	0	0	VIDEO SLOT I/F→MAIN
	18	GND	GND	MAIN	0	0	0	0	0	0	0	-
	19	GND	GND	MAIN	0	0	0	0	0	0	0	-
	20	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	19	VD_SA	VD for ANALOG SYNC	VIDEO SLOT I/F	0	0	Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	VIDEO SLOT I/F→MAIN
AV CN4005	20	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	17	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	18	AUDIO_L	AUDIO L ch	VIDEO SLOT I/F	0	0	Audio signal of SLOT	0	0	0	0	VIDEO SLOT I/F→MAIN
	15	HD_SA	HD for ANALOG SYNC	VIDEO SLOT I/F	0	0	Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	VIDEO SLOT I/F→MAIN
	16	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	13	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	14	AUDIO_R	AUDIO R ch	VIDEO SLOT I/F	0	0	Audio signal of SLOT	0	0	0	0	VIDEO SLOT I/F→MAIN
	11	R(R-Y)	RED(Cr or Pr) for ANALOG	VIDEO SLOT I/F	0	0	Video signal 0.7Vp-p	0	0	0	0	VIDEO SLOT I/F→MAIN
	12	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	9	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	10	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	7	B(B-Y)	BLUE(Cb or Pb) for ANALOG	VIDEO SLOT I/F	0	0	Video signal 0.7Vp-p	0	0	0	0	VIDEO SLOT I/F→MAIN
	8	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	5	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	6	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	3	Y(G)ON_ SYNC	GREEN(Y) for ANALOG(on Sync)	VIDEO SLOT I/F	0	0	Video signal 0.7~1.0Vp-p	0	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	1	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	2	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	1	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
D3 CN5301	2	PNP_WR	EEPROM WRITE PROTECT	MAIN	0	0	0	0	0	0	0	MAIN→VIDEO SLOT I/F
	3	VCC_ DOWN1	VIDEO CARD voltage surveillance	MAIN	0	Normal 3.3Vdc, unusual 0Vdc	Normal 3.3Vdc, unusual 0Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	MAIN	0	0	0	0	0	0	0	-
	5	SCL5	Clock line of the I2C bus	MAIN	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	6	SDA5	Data line of the I2C bus	MAIN	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	7	SCL_VS	Clock line of the I2C bus	MAIN	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	8	SDA_VS	Data line of the I2C bus	MAIN	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	9	GND	GND	MAIN	0	0	0	0	0	0	0	-
	10	IN4_DET	INPUT4 SIGNAL DETECT for AUTO POWER OFF	MAIN	0	When INPUT4 signal is inputted. 0V, When INPUT4 signal is not inputted, 5Vdc	When INPUT4 signal is inputted. 0V, When INPUT4 signal is not inputted, 5Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	11	SLOT_ST1	CARD TYPE SELECT	MAIN	0	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	0	0	VIDEO SLOT I/F→MAIN
	12	S_DIN_SEL	Digital INPUT SELECTOR	MAIN	0	SLOT digital ON 0V,SLOT digita OFF 3.3Vdc	SLOT digital ON 0V,SLOT digita OFF 3.3Vdc	SLOT digital ON 0V,SLOT digita OFF 3.3Vdc	SLOT digital ON 0V,SLOT digita OFF 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	13	FNC1	FUNCTION LOGIC	MAIN	0	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	0	0	0	MAIN→VIDEO SLOT I/F
	14	SLOT_ST2	CARD DETECT for OEM/PIONEER	MAIN	0	PIONEER CARD:.3Vdc OEM CARD: 0V	PIONEER CARD:.3Vdc OEM CARD: 0V	PIONEER CARD:.3Vdc OEM CARD: 0V	PIONEER CARD:.3Vdc OEM CARD: 0V	0	0	VIDEO SLOT I/F→MAIN
	15	IR	Infrared remote control data	MAIN	0	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	16	FNC0	FUNCTION LOGIC	MAIN	0	INPUT4.5 select 5Vdc, INPUT3 select 0V	INPUT4.5 select 5Vdc, INPUT3 select 0V	INPUT4.5 select 5Vdc, INPUT3 select 0V	0	0	0	MAIN→VIDEO SLOT I/F
	17	G4G	3G4G DISCERMMENT	MAIN	0	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	18	DSUBSW_ DET	INPUT1⇔VIDEO CARD ANALOG OUT SELECT	MAIN	0	3.3Vdc: INPUT1 select,0V: VIDEO CARD select	3.3Vdc: INPUT1 select,0V: VIDEO CARD select	3.3Vdc: INPUT1 select,0V: VIDEO CARD select	3.3Vdc: INPUT1 select,0V: VIDEO CARD select	0	0	VIDEO SLOT I/F→MAIN
	19	GND	GND	MAIN	0	0	0	0	0	0	0	-
	20	VYOBI2	NC	MAIN	-	-	-	-	-	-	-	-
	21	VYOBI1	RESERVE	MAIN	0	3.3V	3.3V	3.3V	3.3V	0	0	VIDEO SLOT I/F⇔MAIN
	22	GND	GND	MAIN	0	0	0	0	0	0	0	-
	23	GPC5	VIDEO CARD⇔ COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	24	GPC2	VIDEO CARD⇔ COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	25	GPC4	VIDEO CARD⇔ COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	26	GPC1	VIDEO CARD⇔ COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	27	GPC3	VIDEO CARD⇔ COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	28	HYOUJI_X	2 SCREENS Permit/Prohibit	MAIN	0	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	29	GND	GND	MAIN	0	0	0	0	0	0	0	-
	30	IN5_HD	INPUT5 SYNC	MAIN	INPUT5 SYNC	0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	31	IN5_VD	INPUT5 SYNC	MAIN	INPUT5 SYNC	0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	32	GND	GND	MAIN	0	0	0	0	0	0	0	-
	33	SOUND1	VIDEO CARD AUDIO SELECT	MAIN	0	INPUT4,5 Audio select 3.4Vdc	INPUT4,5 Audio select 3.4Vdc	INPUT4,5 Audio select 3.4Vdc	0	0	0	MAIN→VIDEO SLOT I/F
	34	FNC2	VIDEO select	MAIN	0	INPUT3 select 0Vdc, INPUT4,5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 selec 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	3	FNC3	VIDEO select	MAIN	0	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	36	SOUND2	VIDEO CARD AUDIO SELECT	MAIN	0	INPUT3,5 Audio select 3.4Vdc	INPUT3,5 Audio select 3.4Vdc	INPUT3,5 Audio select 3.4Vdc	0	0	0	MAIN→VIDEO SLOT I/F
	37	SD_SEL	DIGITAL SIGNAL FORMAT SELECT	MAIN	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port,No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	38	SLOT_ST3	CARD TYPE SELECT	MAIN	0	A/D Input Port, No VIDEO CARD 3.3Vd	A/D Input Port, No VIDEO CARD 3.3Vd	A/D Input Port, No VIDEO CARD 3.3Vd	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	39	RESETX1	RESET	MAIN	0	RESET 0V,Release RESET 3.3Vdc	RESET 0V,Release RESET 3.3Vdc	RESET 0V,Release RESET 3.3Vdc	RESET 0V,Release RESET 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	40	GND	GND	MAIN	0	0	0	0	0	0	0	-
	41	INT_EXT	IF U / 232C SELECT	MAIN	0	0V: 232C CONNECTOR⇔VIDEO CARD,3.3Vdc: PDP⇔ VIDEO CARD	0V: 232C CONNECTOR⇔VIDEO CARD,3.3Vdc: PDP⇔ VIDEO CARD	0V: 232C CONNECTOR⇔VIDEO CARD,3.3Vdc: PDP⇔ VIDEO CARD	0V: 232C CONNECTOR⇔VIDEO CARD,3.3Vdc: PDP⇔ VIDEO CARD	0	0	VIDEO SLOT I/F→MAIN
	42	RXD_CARD	UART chosen by GET_UART	MAIN	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	43	FIRST_RXD	RXD Direct to 232C	MAIN	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	44	TXD_CARD	UART chosen by GET_UART	MAIN	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	VIDEO SLOT I/F→MAIN

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	46	GND	GND	MAIN	0	0	0	0	0	0	0	-
	47	KEY	KEY SIGNAL	MAIN	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	48	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	49	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	50	VDDM3.3V	3.3V supply for microcomputer	MAIN	0	3.3V	3.3V	3.3V	3.3V	0	0	MAIN→VIDEO SLOT I/F
D3 CN4004	50	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	49	PNP_WR	EEPROM WRITE PROTECT	VIDEO SLOT I/F	0	0	0	0	0	0	0	MAIN→VIDEO SLOT I/F
	48	VCC_ DOWN1	VIDEO CARD voltage surveillance	VIDEO SLOT I/F	0	3.3Vdc, Unusual 0Vdc	Normal 3.3Vdc, Unusual 0Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN
	47	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	46	SCL5	Clock line of the I2C bus	VIDEO SLOT I/F	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	45	SDA5	Data line of the I2C bus	VIDEO SLOT I/F	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	44	SCL_VS	Clock line of the I2C bus	VIDEO SLOT I/F	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	43	SDA_VS	Data line of the I2C bus	VIDEO SLOT I/F	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	42	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	41	IN4_DET	INPUT4 SIGNAL DETECT for AUTO POWER OFF	VIDEO SLOT I/F	0	With INPUT4 0V,Without INPUT4 5Vdc	With INPUT4 0V,Without INPUT4 5Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN
	40	SLOT_ST1	CARD TYPE SELECT	VIDEO SLOT I/F	0	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V,When equipped with PDA-5004 0.36Vdc	0	0	VIDEO SLOT I/F→MAIN
	39	S_DIN_SEL	Digital INPUT SELECTOR	VIDEO SLOT I/F	0	SLOT digital ON 0V,SLOT digital OFF 3.3Vdc	SLOT digital ON 0V,SLOT digital OFF 3.3Vdc	SLOT digital ON 0V,SLOT digital OFF 3.3Vdc	SLOT digital ON 0V,SLOT digital OFF 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	38	FNC1	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	0	0	0	MAIN→VIDEO SLOT I/F
	37	SLOT_ST2	CARD DETECT for OEM/PIONEER	VIDEO SLOT I/F	0	PIONEER CARD:.3Vdc, OEM CARD: 0V	PIONEER CARD:.3Vdc, OEM CARD: 0V	PIONEER CARD:.3Vdc, OEM CARD: 0V	PIONEER CARD:.3Vdc, OEM CARD: 0V	0	0	VIDEO SLOT I/F→MAIN
	36	IR	INFRARED REMOTE CONTROL DATA	VIDEO SLOT I/F	0	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	35	FNC0	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	0	0	MAIN→VIDEO SLOT I/F
	34	G4G	3G4G DISCERMMENT	VIDEO SLOT I/F	0	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	33	DSUBSW_ DET	INPUT1⇔VIDEO CARD ANALOG OUT SELECT	VIDEO SLOT I/F	0	3.3Vdc: INPUT1 select, 0V: VIDEO CARD select	3.3Vdc: INPUT1 select, 0V: VIDEO CARD select	3.3Vdc: INPUT1 select, 0V: VIDEO CARD select	3.3Vdc: INPUT1 select, 0V: VIDEO CARD select	0	0	VIDEO SLOT I/F→MAIN
	32	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	31	VYOBI2	NC	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	30	VYOBI1	RESERVE	VIDEO SLOT I/F	0	3.3Vdc	3.3Vdc	3.3Vdc	3.3Vdc	0	0	VIDEO SLOT I/F⇔MAIN
	29	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	28	GPC5	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	27	GPC2	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	26	GPC4	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	25	GPC1	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	24	GPC3	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	23	HYOUJI_X	2 SCREENS Permit /Prohibit	VIDEO SLOT I/F	0	Permit 0Vdc,Prohibit 3.3Vdc	Permit 0Vdc,Prohibit 3.3Vdc	Permit 0Vdc,Prohibit 3.3Vdc	Permit 0Vdc,Prohibit 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	22	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	21	IN5_HD	INPUT5Ä@SYNC	VIDEO SLOT I/F	INPUT5 SYNC	0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	20	IN5_VD	INPUT5Ä@SYNC	VIDEO SLOT I/F	INPUT5 SYNC	0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	19	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	18	SOUND1	VIDEO CARD AUDIO SELECT	VIDEO SLOT I/F	0	INPUT4,5 AUDIO SELECT 3.4Vdc	INPUT4,5 AUDIO SELECT 3.4Vdc	INPUT4,5 AUDIO SELECT 3.4Vdc	0	0	0	MAIN→VIDEO SLOT I/F
	17	FNC2	VIDEO SELECT	VIDEO SLOT I/F	0	NPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	NPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	NPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	NPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	16	FNC3	VIDEO SELECT	VIDEO SLOT I/F	0	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	15	SOUND2	VIDEO CARD AUDIO SELECT	VIDEO SLOT I/F	0	INPUT3,5 AUDIO SELECT 3.4Vdc	INPUT3,5 AUDIO SELECT 3.4Vdc	INPUT3,5 AUDIO SELECT 3.4Vdc	0	0	0	MAIN→VIDEO SLOT I/F
	14	SD_SEL	DIGITAL SIGNAL FORMAT SELECT	VIDEO SLOT I/F	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	13	SLOT_ST3	CARD TYPE SELECT	VIDEO SLOT I/F	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	12	RESETX1	RESET	VIDEO SLOT I/F	0	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	ESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	11	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	10	INT_EXT	IF U / 232C SELECT	VIDEO SLOT I/F	0	0V: 232C CONNECTOR, VIDEO CARD, 3.3Vdc PDP ⇔ VIDEO CARD	0V: 232C CONNECTOR, VIDEO CARD, 3.3Vdc PDP ⇔ VIDEO CARD	0V: 232C CONNECTOR, VIDEO CARD, 3.3Vdc PDP ⇔ VIDEO CARD	0V: 232C CONNECTOR, VIDEO CARD, 3.3Vdc PDP ⇔ VIDEO CARD	0	0	VIDEO SLOT I/F→MAIN
	9	RXD_CARD	GET_UART SELECT	VIDEO SLOT I/F	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	8	FIRST_RXD	RXD Direct to 232C	VIDEO SLOT I/F	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	7	TXD_CARD	UART chosen by GET_UART	VIDEO SLOT I/F	0	Clock signal used during dat a transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during dat a transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during dat a transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during dat a transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	VIDEO SLOT I/F→MAIN
	6	GET_UART	U-ART PROCESS SELECT	VIDEO SLOT I/F	0	3.3Vdc: 232C Connector ⇔PDP 0V 232 Connector: VIDEO CARD: PDP⇔VIDEO CARD	3.3Vdc: 232C Connector ⇔PDP 0V 232 Connector: VIDEO CARD: PDP⇔VIDEO CARD	3.3Vdc: 232C Connector ⇔PDP 0V 232 Connector: VIDEO CARD: PDP⇔VIDEO CARD	3.3Vdc: 232C Connector ⇔PDP 0V 232 Connector: VIDEO CARD: PDP⇔VIDEO CARD	0	0	VIDEO SLOT I/F→MAIN
	5	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	4	KEY	KEY SIGNAL	VIDEO SLOT I/F	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	3	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	2	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	1	VDDM3.3V	3.3V power supply for microcomputer	VIDEO SLOT I/F	0 0	3.3V	3.3V	3.3V	3.3V	0	0	MAIN→VIDEO SLOT I/F
D2 CN6302	1	GND	GND	MAIN	0	0	0	0	0	0	0	-
	2	RA0	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	3	GND	GND	MAIN	0	0	0	0	0	0	0	-
	4	BB7	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	5	GND	GND	MAIN	0	0	0	0	0	0	0	-
	6	RA1	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	7	GND	GND	MAIN	0	0	0	0	0	0	0	-
	8	BB6	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	9	GND	GND	MAIN	0	0	0	0	0	0	0	-
	10	RA2	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	11	GND	GND	MAIN	0	0	0	0	0	0	0	-
	12	BB5	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	13	GND	GND	MAIN	0	0	0	0	0	0	0	-
	14	RA3	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	15	GND	GND	MAIN	0	0	0	0	0	0	0	-
	16	BB4	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	17	GND	GND	MAIN	0	0	0	0	0	0	0	-
	18	RA4	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	19	GND	GND	MAIN	0	0	0	0	0	0	0	-
	20	BB3	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	21	GND	GND	MAIN	0	0	0	0	0	0	0	-
	22	RA5	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	23	GND	GND	MAIN	0	0	0	0	0	0	0	-
	24	BB2	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/→MAIN
	25	GND	GND	MAIN	0	0	0	0	0	0	0	-
	26	RA6	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	27	GND	GND	MAIN	0	0	0	0	0	0	0	-
	28	BB1	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	29	GND	GND	MAIN	0	0	0	0	0	0	0	-
	30	RA7	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	31	GND	GND	MAIN	0	0	0	0	0	0	0	-
	32	BB0	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	33	GND	GND	MAIN	0	0	0	0	0	0	0	-
	34	GA0	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	35	GND	GND	MAIN	0	0	0	0	0	0	0	-

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	36	GB7	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	37	GND	GND	MAIN	0	0	0	0	0	0	0	-
	38	GA1	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	39	GND	GND	MAIN	0	0	0	0	0	0	0	-
	40	GB6	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	41	GND	GND	MAIN	0	0	0	0	0	0	0	-
	42	GA2	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	43	GND	GND	MAIN	0	0	0	0	0	0	0	-
	44	GB5	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	45	GND	GND	MAIN	0	0	0	0	0	0	0	-
	46	GA3	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	47	GND	GND	MAIN	0	0	0	0	0	0	0	-
	48	GB4	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	49	GND	GND	MAIN	0	0	0	0	0	0	0	-
	50	GA4	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	"AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
D2 CN4003	50	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	49	RA0	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	48	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	47	BB7	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	46	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	45	RA1	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	44	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	43	BB6	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	42	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	41	RA2	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	40	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	39	BB5	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	38	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	37	RA3	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	36	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	35	BB4	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	34	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	33	RA4	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	32	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	31	BB3	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	30	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	29	RA5	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	28	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	27	BB2	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	26	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	25	RA6	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	24	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	23	BB1	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	22	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	21	RA7	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	20	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	19	BB0	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	18	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	17	GA0	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	16	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	15	GB7	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	14	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	13	GA1	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	12	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	11	GB6	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	10	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	9	GA2	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	8	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	7	GB5	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	6	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	5	GA3	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	3	GB4	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	2	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	1	GA4	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
D1 CN6301	1	GB3	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	2	GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	GA5	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	MAIN	0	0	0	0	0	0	0	-
	5	GB2	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	6	GND	GND	MAIN	0	0	0	0	0	0	0	-
	7	GA6	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	8	GND	GND	MAIN	0	0	0	0	0	0	0	-
	9	GB1	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	10	GND	GND	MAIN	0	0	0	0	0	0	0	-
	11	GA7	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	12	GND	GND	MAIN	0	0	0	0	0	0	0	-
	13	GB0	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	14	GND	GND	MAIN	0	0	0	0	0	0	0	-
	15	BA0	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	16	GND	GND	MAIN	0	0	0	0	0	0	0	-
	17	RB7	RED DIGITALÂi2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	18	GND	GND	MAIN	0	0	0	0	0	0	0	-
	19	BA1	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	20	GND	GND	MAIN	0	0	0	0	0	0	0	-
	21	RB6	RED DIGITALÂi2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	22	GND	GND	MAIN	0	0	0	0	0	0	0	-
	23	BA2	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	24	GND	GND	MAIN	0	0	0	0	0	0	0	-
	25	RB5	RED DIGITALÂi2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	26	GND	GND	MAIN	0	0	0	0	0	0	0	-
	27	BA3	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	28	GND	GND	MAIN	0	0	0	0	0	0	0	-
	29	RB4	RED DIGITALÂi2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	30	GND	GND	MAIN	0	0	0	0	0	0	0	-
	31	BA4	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	32	GND	GND	MAIN	0	0	0	0	0	0	0	-
	33	RB3	RED DIGITALÂi2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	34	GND	GND	MAIN	0	0	0	0	0	0	0	-
	35	BA5	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	36	GND	GND	MAIN	0	0	0	0	0	0	0	-
	37	RB2	RED DIGITALÂi2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	38	GND	GND	MAIN	0	0	0	0	0	0	0	-
	39	BA6	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	40	GND	GND	MAIN	0	0	0	0	0	0	0	-
	41	RB1	RED DIGITALÂi2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	42	GND	GND	MAIN	0	0	0	0	0	0	0	-
	43	BA7	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	44	GND	GND	MAIN	0	0	0	0	0	0	0	-
	45	RB0	RED DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	46	GND	GND	MAIN	0	0	0	0	0	0	0	-
	47	CLK	CLK	MAIN	0	3.3Vac	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	48	DE	DE for SYSTEM SYNC	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	49	HD	HD for DIGITAL SYNC	MAIN	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	50	VD	VD for DIGITAL SYNC	MAIN	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
D1 CN4002	50	GB3	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	49	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	48	GA5	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	47	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	46	GB2	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	45	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	44	GA6	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	43	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	42	GB1	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	41	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	40	GA7	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	39	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	38	GB0	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	37	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	36	BA0	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	"AC Power OFF" (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	35	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	34	RB7	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	33	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	32	BA1	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	31	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	30	RB6	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	29	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	28	BA2	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	27	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	26	RB5	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	25	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	24	BA3	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	23	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	22	RB4	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	21	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	20	BA4	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	19	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	18	RB3	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	17	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	16	BA5	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	15	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	14	RB2	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	13	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	12	BA6	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	11	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	10	RB1	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	9	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	8	BA7	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	7	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	6	RB0	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	5	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	4	CLK	CLK	VIDEO SLOT I/F	0	3.3Vac	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	3	DE	DE for SYSTEM SYNC	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	2	HD	HD for DIGITAL SYNC	VIDEO SLOT I/F	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	1	VD	VD for DIGITAL SYNC	VIDEO SLOT I/F	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
PS CN4001	1	V+12V	12V power supply for SLOT circuits	VIDEO SLOT I/F	0	12V	12V	0	0	0	0	POWER→VIDEO SLOT I/F
	2	V+12V	12V power supply for SLOT circuits	VIDEO SLOT I/F	0	12V	12V	0	0	0	0	POWER→VIDEO SLOT I/F
	3	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	5	V+16.5	16.5V power supply for SLOT circuits	VIDEO SLOT I/F	0	16.5V	16.5V	0	0	0	0	POWER→VIDEO SLOT I/F
	6	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	7	V+3.3V	3.3V power supply for SLOT circuits	VIDEO SLOT I/F	0	3.3V	3.3V	0	0	0	0	POWER→VIDEO SLOT I/F
	8	V+3.3V	3.3V power supply for SLOT circuits	VIDEO SLOT I/F	0	3.3V	3.3V	0	0	0	0	POWER→VIDEO SLOT I/F
	9	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	10	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	11	V+3.3STB	3.3V power supply for SLOT STB circuits	VIDEO SLOT I/F	0	3.3V	3.3V	3.3V	3.3V	0	0	POWER→VIDEO SLOT I/F
	12	GND	GND	VIDEO SLOT I/F	-	0	0	0	0	0	0	-
	13	NC	Non-connection termial	VIDEO SLOT I/F	0	-	-	-	-	-	-	-
PS	13	V+12V	12V power supply for SLOT circuits	PSU	0	12V	12V	0	0	0	0	POWER→VIDEO SLOT I/F
	12	V+12V	12V power supply for SLOT circuits	PSU	0	12V	12V	0	0	0	0	POWER→VIDEO SLOT I/F
	11	GND	GND	PSU	0	0	0	0	0	0	0	-
	10	GND	GND	PSU	0	0	0	0	0	0	0	-
	9	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
	8	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
	7	V+3.3V	3.3V power supply for SLOT circuits	PSU	0	3.3V	3.3V	0	0	0	0	POWER→VIDEO SLOT I/F
	6	V+3.3V	3.3V power supply for SLOT circuits	PSU	0	3.3V	0	0	0	0	0	POWER→VIDEO SLOT I/F
	5	GND	GND	PSU	0	0		0	0	0	0	-
	4	GND	GND	PSU	0	0	0	0	0	0	0	-
	3	V+3.3STB	3.3V power supply termial	PSU	0	3.3V	3.3V	3.3V	3.3V	0	0	POWER→VIDEO SLOT I/F
	2	GND	GND	PSU	0	0	0	0	0	0	0	-
	1	NC	Non-connection termial	PSU	-	-	-	-	-	-	-	-
P1	2	V+16.5	16.5V power supply for SLOT circuits	PSU	0	16.5V	6.5V	0	0	0	0	POWER→VIDEO SLOT I/F
	4	GND	GND	PSU	0	0	0	0	0	0	0	-
CN4006	1	GND	GREEN(Y) for ANALOG(on Sync)	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	2	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	3	Y(G)	GREEN(Y) for ANALOG(on Sync)	VIDEO SLOT I/F	0	0	Video signal 0.7~1.0Vp-p	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	5	B	BLUE(Cb or Pb) for ANALOG	VIDEO SLOT I/F	0	0	Video Signal 0.7Vp-p	0	0	0		VIDEO CARD→VIDEO SLOT I/F
	6	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	7	R	RED(Cr or Pr) for ANALOG	VIDEO SLOT I/F	0	0	Video Signal 0.7Vp-p	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	8	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	9	HD_SA	HD for ANALOG SYNC	VIDEO SLOT I/F	0	0	SLO SYNC HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	10	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	11	VD_SA	VD for ANALOG SYNC	VIDEO SLOT I/F	0	0	SLOT SYNC HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	12	GND	GND	O SLOT I/F	0	0	0	0	0	0	0	-
	13	AUDIO_L	AUDIO L ch	VIDEO SLOT I/F	0	0	SLOT AUDIO	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	14	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	15	AUDIO_R	AUDIO R ch	VIDEO SLOT I/F	0	0	SLOTÅ UDIO	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	16	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	17	SLOT_ST1	CARD TYPE SELECT	VIDEO SLOT I/F	0	When equipped with PDA-5003. 0V, When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V, When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V, When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V, When equipped with PDA-5004 0.36Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
	18	S_DIN_SEL	Digital INPUT SELECTOR	VIDEO SLOT I/F	0	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	0	0	VIDEO SLOT I/F→VIDEO CARD
	19	FNC1	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	0	0	0	VIDEO SLOT I/F→VIDEO CARD

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					"AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	"AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	20	FNC0	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	0	0	VIDEO SLOT I/F→VIDEO CARD
	21	V+3.3V	VCC+3.3V(MAX 1.35A)	VIDEO SLOT I/F	0	3.3V	3.3V	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	22	V+3.3V	VCC+3.3V(MAX 1.35A)	VIDEO SLOT I/F	0	3.3V	3.3V	0	0	-	0	VIDEO SLOT I/F→VIDEO CARD
	23	VD_DET	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	0	0	-
	24	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	-	0	-
	25	HD_DET	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	0	-	-
	26	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	27	VD	VD for DIGITAL SYNC	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	-	VIDEO CARD→VIDEO SLOT I/F
	28	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	29	HD	HD for DIGITAL SYNC	VIDEO SLOT I/F		0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	30	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	31	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	32	RB0	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	33	RB1	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	34	RB2	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	35	RB3	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	36	RB4	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	37	RB5	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	38	RB6	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	39	RB7	RED DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F-
	40	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	41	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	42	GB0	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	43	GB1	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	44	GB2	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	45	GB3	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	46	GB4	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	47	GB5	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	48	GB6	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	49	GB7	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	-
	52	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	53	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	54	BB0	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	55	BB1	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	56	BB2	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	57	BB3	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	58	BB4	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	59	BB5	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	60	BB6	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	61	BB7	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	-
	62	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	65	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	66	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	67	KEY	KEY SIGNAL	VIDEO SLOT I/F	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	-
	68	NC	Non-connection termial		-	-	-	-	-	-	-	VIDEO CARD→VIDEO SLOT I/F
	69	TXD_CARD	UART chosen by GET_UART	VIDEO SLOT I/F	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	VIDEO SLOT I/F→VIDEO CARD
	70	RXD_CARD	UART chosen by GET_UART	VIDEO SLOT I/F	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	VIDEO CARD→VIDEO SLOT I/F
	71	INT_EXT	IF U / 232C SELECT	VIDEO SLOT I/F	0	0V:232C CONNECTOR ⇔ VIDEO CARD: 3.3Vdc: PDP⇔ VIDEO CARD	0V:232C CONNECTOR ⇔ VIDEO CARD: 3.3Vdc: PDP⇔ VIDEO CARD	0V:232C CONNECTOR ⇔ VIDEO CARD: 3.3Vdc: PDP⇔ VIDEO CARD	0V:232C CONNECTOR ⇔ VIDEO CARD: 3.3Vdc: PDP⇔ VIDEO CARD	0	0	-
	72	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	73	EMGREQ1_V	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	74	EMGREQ2_V	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	
	75	IC1V_OE	IC1 DIGITAL VIDEO CONTOROL	VIDEO SLOT I/F	0	3.3Vdc	3.3Vdc	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	76	RESETX1	RESET	VIDEO SLOT I/F	0	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	0	0	-
	77	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	VIDEO CARD→VIDEO SLOT I/F
	78	SD_SEL	DIDITAL SIGNAL FORMAT SELECT	VIDEO SLOT I/F	0 0 0 0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→VIDEO CARD
	79	FNC2	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT3 select 0Vdc, INPUT4,5 selec 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 selec 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 selec 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 selec 3.3Vdc	0	0	VIDEO SLOT I/F→VIDEO CARD
	80	FNC3	FUNCTION LOGIC	VIDEO SLOT I/F	- 0 - 0	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	0	0	VIDEO SLOT I/F→VIDEO CARD
	81	SOUND1	AUDIO SELECTOR	VIDEO SLOT I/F	-	INPUT4,5 Audio selec 3.4Vdc	INPUT4,5 Audio selec 3.4Vdc	INPUT4,5 Audio selec 3.4Vdc	0	0	0	-
	82	GND	GND			0	0	0	0	0	0	-
	83	DSUBR	Non-connection termial	VIDEO SLOT I/F	0	-	-	-	-	-	-	-
	84	GND	GND	VIDEO SLOT I/F	INPUT5 SYNC	0	0	0	0	0	0	-
	85	DSUBG	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	86	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	87	DSUBB	Non-connection termial	VIDEO SLOT I/F	0	-	-	-	-	-	-	-
	88	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	89	IN5_HD	INPUT5 SYNC	VIDEO SLOT I/F	0	0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	-
	90	SOUSA_X	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	VIDEO CARD⇔VIDEO SLOT I/F
	91	GPC1	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
	92	GPC2	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
	93	GPC5	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
	95	VYOBI1	RESERVE	VIDEO SLOT I/F	0	3.3Vdc	3.3Vdc	3.3Vdc	3.3Vdc	0	0	

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	"AC Power OFF" (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	95	VYOBI2	NC	VIDEO SLOT I/F	0	-	-	-	-	-	-	
	96	DSUBSW_DET	INPUT1⇔VIDEO CARD ANALOG OUT SELECT	VIDEO SLOT I/F	0	3.3Vdc INPUT1 select, 0V VIDEO CARD select	3.3Vdc INPUT1 select, 0V VIDEO CARD select	3.3Vdc INPUT1 select, 0V VIDEO CARD select	3.3Vdc INPUT1 select, 0V VIDEO CARD select	0	0	VIDEO CARD→VIDEO SLOT I/F
	101	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	102	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	103	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	104	SCL_VS	Clock line of the I2C bus	VIDEO SLOT I/F	0	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	105	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	106	SDA_VS	Data line of the I2C bus	VIDEO SLOT I/F	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	107	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	108	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	109	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	110	V+12V	VCC+12V(MAX 830mA)	VIDEO SLOT I/F	0	12V	12V	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	111	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	112	V+12V		VIDEO SLOT I/F	0	12V	12V	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	113	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	114	V+3.3STB	0.1A	VIDEO SLOT I/F	0	3.3V	3.3V	3.3V	3.3V	0	0	VIDEO SLOT I/F→VIDEO CARD
	115	V+13.5	VCC+13.5V(MAX 220mA)	VIDEO SLOT I/F	0	13.5V	13.5V	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	116	V+13.5	VCC+13.5V(MAX 220mA)	VIDEO SLOT I/F	0	13.5V	13.5V	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	117	IN4_DET	INPUT4 SIGNAL DETECT for AUTO POWER OFF	VIDEO SLOT I/F	0	When INPUT4 signal is inputted. 0V, When INPUT4 signal is not inputted, 5Vdc	When INPUT4 signal is inputted. 0V, When INPUT4 signal is not inputted, 5Vdc	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	118	IN3_DET	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	119	SLOT_ST2	CARD DETECT for OEM/PIONEER	VIDEO SLOT I/F	0	PIONEER CARDÂF. 3Vdc, OEM CARD: 0V	PIONEER CARDÂF. 3Vdc, OEM CARD: 0V	PIONEER CARDÂF. 3Vdc, OEM CARD: 0V	PIONEER CARDÂF. 3Vdc, OEM CARD: 0V	0	0	VIDEO CARD→VIDEO SLOT I/F
	120	IR	INFRARED REMOTE CONTROL DATA	VIDEO SLOT I/F	0	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0	0	VIDEO SLOT I/F→VIDEO CARD
	121	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	122	NC	Non-connection termial	VIDEO SLOT I/F	0	-	-	-	-	-	-	-
	123	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	124	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	125	3G4G	3G4G DISCERMMENT	VIDEO SLOT I/F	0	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V, When equipped with 4G CARD. 3.3Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
	126	IN5_DET	Non-connection termial	VIDEO SLOT I/F	0	-	-	-	-	-	-	-
	127	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	128	DE	DE for SYSTEM SYNC	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	129	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	130	CLK	CLK	VIDEO SLOT I/F	0	3.3Vac	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	131	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	132	BA7	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	133	BA6	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	134	BA5	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	135	BA4	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	136	BA3	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	137	BA2	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	138	BA1	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	139	BA0	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	140	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	141	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	142	GA7	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	143	GA6	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	144	GA5	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	145	GA4	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	146	GA3	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	147	GA2	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	148	GA1	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	149	GA0	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	152	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	153	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	154	RA7	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	155	RA6	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	156	RA5	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	157	RA4	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	158	RA3	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	159	RA2	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	160	RA1	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	161	RA0	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	162	GND	GND	VIDEO SLOT I/F	-	0	0	0	0	0	0	-
	165	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	166	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	167	VSEPSCL	Clock line of the I2C bus	VIDEO SLOT I/F	-	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission (3.3Vac), 3.3Vdc when no data are transmitted	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	168	VSEPSDA	Data line of the I2C bus	VIDEO SLOT I/F	-	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F

Name	Pin No.	Pin name	Function		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet)★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★	
						No signal	With signal					
	169	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	170	GET_UART	U-ART PROCESS SELECT	VIDEO SLOT I/F	0	3.3Vdc::232C Connector⇔ PDP, 0V: 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	3.3Vdc::232C Connector⇔ PDP, 0V: 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	3.3Vdc::232C Connector⇔ PDP, 0V: 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	3.3Vdc::232C Connector⇔ PDP, 0V: 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	0	0	VIDEO CARD→VIDEO SLOT I/F
	171	FIRST_RXD	RXD Direct to 232C	VIDEO SLOT I/F	0	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data recieved (3.3Vac), 3.3Vdc when no data are received.	0	0	VIDEO SLOT I/F→VIDEO CARD
	172	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	173	EMGREQ1_S	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	174	EMGREQ2_S	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	175	IC1S_OE	IC1 DIGITAL VIDEO CONTOROL	VIDEO SLOT I/F	0	3.3Vdc	3.3Vdc	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	176	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	177	NC	Non-connection termial	VIDEO SLOT I/F	0	-	-	-	-	-	-	-
	178	NC	Non-connection termial	VIDEO SLOT I/F	0	-	-	-	-	-	-	-
	179	SLOT_ST3	CARD TYPE SELECT	VIDEO SLOT I/F	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
	180	M_CHOICE	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	181	SOUND2	AUDIO SELECTOR	VIDEO SLOT I/F	0	INPUT3,5 Audio select 3.4Vdc	INPUT3,5 Audio select 3.4Vdc	INPUT3,5 Audio select 3.4Vdc	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	182	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	183	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	184	DSUBH	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	185	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	186	DSUBV	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	187	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	188	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	189	IN5_VD	INPUT5 SYNC	VIDEO SLOT I/F	INPUT5 SYNC	0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO CARD→VIDEO SLOT I/F
	190	HYOUJI_X	2 SCREENS Permit/Prohibit	VIDEO SLOT I/F	0	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
	191	GPC3	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
	192	GPC4	VIDEO CARD⇔ COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
	193	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	194	VYOBI4	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	195	VYOBI5	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	196	VYOBI6	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-

Prease refar to another file "file name: 42X_connec_discrip_051121_2" without these connector information (about PDP module).

5. PCB PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*

● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω	→ *56 x 10[1]* →	*561*	*RD1/4PU 5 6 1 J*
47k Ω	→ *47 x 10[3]* →	*473*	*RD1/4PU 4 7 3 J*
0.5 Ω	→	*R50*	*RN2H R 5 0 K*
1 Ω	→	*1R0*	*RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	→ *562 x 10[1]* →	*5621*	*RN1/4PC 5 6 2 1 F*

LIST OF ASSEMBLIES

Mark	No.	Description	Part No.
NSP	1	PANEL CHASSIS (FT) ASSY	AWU1136
NSP	2	42 ADDRESS ASSY	AWV2253
NSP	2	42 SCAN ASSY	AWV2252
NSP	3	42 SCAN A ASSY	AWW1071
NSP	3	42 SCAN B ASSY	AWW1072
NSP	1	42 X DRIVE ASSY	AWV2250
	2	42 X DRIVE ASSY	AWW1067
	2	SUS CLAMP 1 ASSY	AWW1022
	2	SUS CLAMP 2 ASSY	AWW1023
	1	43 Y DRIVE ASSY	AWV2251
	1	MD DIGITAL ASSY	AWV2254
	1	MAIN ASSY (for 425CMX)	AWV2285
	2	MAIN ASSY (for 425CMX)	AWW1100
	2	VSIF ASSY (for 425CMX)	AWW1101
	1	MAIN ASSY (for 42MXE10)	AWV2286
	2	MAIN ASSY (for 42MXE10)	AWW1112
	2	VSIF ASSY (for 42MXE10)	AWW1113
	1	SUB ASSY	AWV2287
	2	SENB ASSY	AWW1102
	2	SENC ASSY	AWW1103
	2	SEND ASSY	AWW1104
	2	AUDIO ASSY	AWW1105
	2	COMMSLOT ASSY	AWW1106
	2	COMMSLOT IF ASSY	AWW1107
	2	KEY ASSY	AWW1108
	2	LED2 ASSY	AWW1109
⚠	1	POWER SUPPLY UNIT	AXY1127

■ CONTRAST OF PCB ASSEMBLIES

MAIN ASSY

AWW1100 and AWW1112 are constructed the same except for the following :

Mark	Symbol and Description	AWW1100	AWW1112
	R9111	RS1/10SR0R0J	Not used
	R9112	Not used	RS1/10SR0R0J
	R9113	RS1/10SR0R0J	Not used
	R9114	Not used	RS1/10SR0R0J

VSIF ASSY

AWW1101 and AWW1113 are constructed the same except for the following :

Mark	Symbol and Description	AWW1101	AWW1113
	R4042	RS1/10SR0R0J	Not used
	R4043	Not used	RS1/10SR0R0J

Mark	No.	Description	Part No.
		MAIN ASSY (425CMX)	
		MAIN BLOCK1	
		SEMICONDUCTORS	
	IC9508		24LC128(I)SN
	IC9505		BD4727G
	IC9506		MC74VHCT132ADT
⚠	IC9503		NJM2846DL3-33
⚠	IC9502		PQ1U501M2ZPH
	IC9507		RTC-4543SA-B-7
	IC9504		SN74LVC08APW
	IC9509		TC74VHCT08AFTS1
	Q9503		2SA1576A
	D9501, D9502, D9504, D9506		DAN202U
	D9508		MZ2J73200L
	D9507		RB751S-40
	D9514, D9521		RD3R3S(B1)
		COILS AND FILTERS	
	F9501-F9503		DTL1034
		CAPACITORS	
	C9508 (4.7/16)		ACG1134
	C9517 (1000/10)		ACH1431
	BT9501		AEX1030
	C9531, C9532		CCSRCH100D50
	C9510, C9525, C9547		CCSRCH102J50

Mark No.	Description	Part No.
	C9540	CCSRCH181J50
	C9523	CCSRCH391J50
	C9520, C9521	CCSRCH470J50
	C9537	CCSRCH561J50
	C9502	CEHVKW470M16
	C9538	CEHVKW470M6R3
	C9512	CKSQYB105K16
	C9509, C9514	CKSRYB103K50
	C9501, C9503, C9504, C9511, C9518	CKSRYB104K25
	C9522, C9528-C9530, C9533-C9536	CKSRYB104K25
	C9541-C9546	CKSRYB104K25
	C9524	CKSRYB223K50
	C9505	CKSRYB334K10

RESISTORS

	R9692, R9693	RAB4CQ103J
	R9665	RS1/10SR1501F
	R9688	RS1/10SR2002F
	R9636	RS1/10SR2202F
	R9563, R9585, R9637, R9638	RS1/10SR3602F
	R9640-R9642, R9644	RS1/10SR3602F
	R9686	RS1/8SQ0R0J
	R9685	RS1/8SQ220J
	R9630, R9687	RS1/8SQ470J
	Other Resistors	RS1/10S###J

OTHERS

	CN9501 CONNECTOR	AKM1275
	CN9503 SOCKET	AKP1286
⚠	X9501 (33.333MHz) CRYSTAL	ASS1201

MAIN BLOCK2

SEMICONDUCTORS

⚠	IC5009	BA05FP
	IC5004	BA7657F
	IC5003	BR24C21FJ
	IC5007	EL5362IUZ-T7
⚠	IC5006	NJM2846DL3-05
	IC5001	SN74LV14APW
	IC5002	SN74LVC14APW
	IC5008	SN74LVC2G126DCTR
	IC5005	TC74LCX157FTS1
	Q5001-Q5003, Q5016, Q5017	2SC4081
	Q5018	DTC144EUA
	D5010, D5017, D5020, D5024	DAN202U
	D5011-D5013, D5021-D5023	DAN217U
	D5001-D5007, D5018, D5019	UDZS5R6(B)

COILS AND FILTERS

	L5003 CHIP COIL	BTH1100
	L5001, L5002, L5004, L5005 INDUCTOR	BTH1102
	F5001, F5002 INDUCTOR	CTF1609
	F5025 CHIP SOLID INDUCTOR	DTL1041
	F5003-F5007, F5010-F5012 CHIP SOLID INDUCTOR	OTL1046
	F5014-F5018, F5031-F5035	OTL1046

CAPACITORS

	C5001, C5002, C5041, C5051 (2.2/16)	ACG1133
	C5044-C5049, C5056 (4.7/16)	ACG1134
	C5037, C5065 (100/16)	ACH1430
	C5060, C5062-C5064 (1000/10)	ACH1431
	C5010-C5012 (47/6.3)	ACH1444

Mark No.	Description	Part No.
	C5033	CCSRCH471J50
	C5021-C5026	CCSRCH4R0C50
	C5050, C5053, C5058	CCSRCH5R0C50
	C5020	CEHVKW100M16
	C5007-C5009, C5034, C5059	CEHVKW470M16
	C5061	CKSQYB334K50
	C5005, C5014-C5019	CKSRYB103K50
	C5003, C5004, C5035, C5036	CKSRYB104K25
	C5042, C5043, C5052, C5057	CKSRYB104K25
	C5013	CKSRYB105K10
	C5054	CKSRYB334K10

RESISTORS

	R5058, R5059, R5062, R5063	RS1/10SR1501F
	R5067, R5068	RS1/10SR1501F
	R5074-R5076	RS1/10SR68R0F
	R5061, R5065, R5071	RS1/10SR7500F
	R5004-R5006	RS1/10SR75R0F
	R5082, R5083	RS1/8SQ0R0J
	R5072, R5073, R5077, R5078	RS1/8SQ111J
	Other Resistors	RS1/10S###J

OTHERS

	CN5001 20P CONNECTOR	AKM1343
	CN5002, CN5003 15P D-SUB SOCKET	AKP1214

MAIN BLOCK3

SEMICONDUCTORS

	IC5301	BU2152FS
	IC5304	MAX7313AEG
	IC5308	NJM2750M
	IC5306	NJM4580V
⚠	IC5303	NJM78M09DL1A
	IC5305	SN74LVC2G126DCTR
	IC5307	TC74VHC541FTS1
	Q5373	2SA1576A
	Q5371, Q5372	2SC4081
	D5307	DAN202U
	D5376	DAN217U
	D5375	RB160M-40

COILS AND FILTERS

	L5371 CHIP COIL	BTH1102
	F5371, F5372 INDUCTOR	CTF1609
	F5311, F5312 CHIP IMPEDER	DTL1034
	F5301-F5303 CHIP SOLID INDUCTOR	DTL1041

CAPACITORS

	C5389, C5390, C5402, C5403 (2.2/16)	ACG1133
	C5396, C5397 (4.7/16)	ACG1134
	C5359, C5400 (100/16)	ACH1430
	C5385-C5388	CCSRCH101J50
	C5371-C5374	CCSRCH102J50
	C5377-C5380	CCSRCH221J50
	C5393	CEHVKW100M16
	C5362	CEHVKW330M25
	C5395	CEHVKW470M16
	C5381-C5384, C5398, C5399	CKSQYB105K16
	C5301-C5304, C5360, C5361, C5363	CKSRYB104K25
	C5391, C5401	CKSRYB104K25
	C5305	CKSRYB104K50

Mark	No.	Description	Part No.
	C5375, C5376		CKSRYB222K50
	RESISTORS		
A	R5303		RAB4CQ101J
	R5394-R5397		RS1/10SR2202F
	R5376, R5377		RS1/10SR8200F
	Other Resistors		RS1/10S###J
	OTHERS		
	CN5301	50P CONNECTER	AKM1345
	JA5371-JA5373	JACK	AKN1075

MAIN BLOCK4

SEMICONDUCTORS

B	IC5605		BA7078BF
	IC5601		BA7657F
	IC5602		SM5301CS
	IC5606		SN74LVC2G126DCTR
	IC5604		TC74LCX157FTS1
	IC5603		TC74VHC153FT
	Q5602, Q5606		2SA1576A
	Q5601, Q5603, Q5604		2SC4081
	Q5607		DTC144EUA

COILS AND FILTERS

	L5601	CHIP COIL	BTH1100
C	L5602, L5603, L5606, L5607	CHIP COIL	BTH1102
	L5604, L5605	CHIP COIL	BTH1104

CAPACITORS

	C5625, C5629 (2.2/16)		ACG1133
	C5643, C5676 (4.7/16)		ACG1134
	C5672 (100/16)		ACH1430
	C5646-C5648 (47/6.3)		ACH1444
	C5645		CCSRCH101J50
	C5670		CCSRCH471J50
	C5658-C5663		CCSRCH4R0C50
D	C5677		CCSRCH561J50
	C5624, C5631, C5649-C5651, C5678		CEHVKW470M16
	C5616-C5618, C5636, C5638		CKSQYB105K16
	C5652-C5657, C5681		CKSRYB103K50
	C5619-C5623, C5626-C5628, C5630		CKSRYB104K25
	C5632, C5634, C5644, C5671		CKSRYB104K25
	C5679, C5680		CKSRYB104K25
	C5640		CKSRYB473K50
	C5635, C5637, C5642		CKSRYF474Z25

RESISTORS

E	R5672		RS1/10SR2700F
	R5673		RS1/10SR3000F
	Other Resistors		RS1/10S###J

MAIN BLOCK5

SEMICONDUCTORS

	IC5903		BA7078BF
	IC5901		BA7657F
	IC5905		SM5301CS
	IC5904		TC74LCX157FTS1
	IC5902		TC74VHC153FT
F	Q5901, Q5903		2SA1576A
	Q5902, Q5904, Q5905		2SC4081
	D5901-D5903		DAN217U

Mark	No.	Description	Part No.

COILS AND FILTERS

	L5905	CHIP COIL	BTH1100
	L5901-L5903	CHIP COIL	BTH1102
	L5904, L5907	CHIP COIL	BTH1104

CAPACITORS

	C5925, C5942 (2.2/16)		ACG1133
	C5934, C5945 (4.7/16)		ACG1134
	C5930 (100/16)		ACH1430
	C5901-C5903 (47/6.3)		ACH1444
	C5961		CCSRCH101J50
	C5927		CCSRCH471J50
	C5913-C5918		CCSRCH4R0C50
	C5938		CCSRCH561J50
	C5907-C5909, C5939, C5941, C5970		CEHVKW470M16
	C5935-C5937, C5956, C5958		CKSQYB105K16
	C5904-C5906, C5910-C5912		CKSRYB103K50
	C5926, C5928, C5929, C5940		CKSRYB104K25
	C5946-C5949, C5954, C5962, C5964		CKSRYB104K25
	C5966-C5968		CKSRYB104K25
	C5952		CKSRYB473K50
	C5955, C5957, C5960		CKSRYF474Z25

RESISTORS

	R5930		RS1/10SR2700F
	R5931		RS1/10SR3000F
	Other Resistors		RS1/10S###J

MAIN BLOCK6

SEMICONDUCTORS

	IC6302, IC6304		IDT2305A
	IC6301		PD6435A

COILS AND FILTERS

	F6301, F6302, F6304	CHIP BEEDS FILTER	BTX1041

CAPACITORS

	C6320		CEHVKW470M6R3
	C6321-C6337		CKSRYB103K50
	C6301-C6313, C6315, C6316, C6338		CKSRYB104K25
	C6340, C6343		CKSRYB104K25

RESISTORS

	R6356, R6364		RAB4CQ102J
	R6301-R6312		RAB4CQ103J
	R6313-R6324		RAB4CQ220J
	R6334-R6345		RAB4CQ470J
	Other Resistors		RS1/10S###J

OTHERS

	⚠FU6301	PROTECTOR(4.5A)	AEK1082
	CN6301, CN6302	50P CONNECTER	AKM1345
	⚠X6301 (14.3MHz)	CERAMIC	ASS1169

MAIN BLOCK7

SEMICONDUCTORS

	⚠IC6502		NJM2846DL3-33
	IC6503		SN74LVC1G125DCK
	IC6501		TDA8754HL/14/C1
	Q6501-Q6503		2SA1576A
	D6501		DAN202U

COILS AND FILTERS

	L6501	INDUCTOR	ATH1127

Mark	No.	Description	Part No.
	L6502	CHIP INDUCTOR	ATL1148
	F6501-F6505	CHIP BEEDS FILTER	BTX1041

CAPACITORS

	C6504 (2.2/16)	ACG1133
	C6511 (100/16)	ACH1430
	C6519, C6521	CCSRCH331J50
	C6516	CCSRCH681J50
	C6501, C6503	CEHVKW221M10
	C6505, C6507, C6509, C6517, C6518	CKSQYB105K16
	C6523, C6524, C6529, C6530	CKSQYB105K16
	C6534, C6535	CKSQYB105K16
	C6502, C6506, C6508, C6510	CKSRYB104K25
	C6512-C6514, C6520, C6522	CKSRYB104K25
	C6525, C6526, C6528, C6531, C6533	CKSRYB104K25
	C6536, C6538-C6550, C6552, C6553	CKSRYB104K25
	C6515	CKSRYB224K16
	C6527, C6532, C6537	CKSRYB472K50

RESISTORS

	R6512, R6515, R6518	RS1/10SR18R0F
	R6510, R6513, R6516	RS1/10SR4300F
	R6501-R6503	RS1/8SQ0R0J
	Other Resistors	RS1/10S###J

MAIN BLOCK8

SEMICONDUCTORS

⚠	IC6702	NJM2846DL3-33
	IC6703	SN74LVC1G125DCK
	IC6701	TDA8754HL/14/C1
	Q6701-Q6703	2SA1576A
	D6701	DAN202U

COILS AND FILTERS

	L6701 INDUCTOR	ATH1127
	L6702 CHIP INDUCTOR	ATL1148
	F6701-F6705 CHIP BEEDS FILTER	BTX1041

CAPACITORS

	C6704 (2.2/16)	ACG1133
	C6711 (100/16)	ACH1430
	C6719, C6721	CCSRCH331J50
	C6716	CCSRCH681J50
	C6702, C6703	CEHVKW221M10
	C6705, C6707, C6709, C6717, C6718	CKSQYB105K16
	C6723, C6724, C6729, C6730	CKSQYB105K16
	C6734, C6735	CKSQYB105K16
	C6701, C6706, C6708, C6710	CKSRYB104K25
	C6712-C6714, C6720, C6722	CKSRYB104K25
	C6725, C6726, C6728, C6731, C6733	CKSRYB104K25
	C6736, C6738-C6750, C6752, C6753	CKSRYB104K25
	C6715	CKSRYB224K16
	C6727, C6732, C6737	CKSRYB472K50

RESISTORS

	R6712, R6715, R6718	RS1/10SR18R0F
	R6710, R6713, R6716	RS1/10SR4300F
	R6701-R6703	RS1/8SQ0R0J
	Other Resistors	RS1/10S###J

MAIN BLOCK9

SEMICONDUCTORS

	IC7002, IC7005	BR24L02FJ-W
⚠	IC7003, IC7006	PQ20WZ11
	IC7001	SII1169CTU
	IC7004	SN74AHC2G66HDCT
	Q7005	2SC2412K
	Q7001, Q7002, Q7004	DTC144EUA
	Q7003	SM6K2
	D7001, D7010-D7012	DAN217U
	D7002-D7009	MA147

COILS AND FILTERS

	F7004 CHIP BEEDS FILTER	BTX1041
	F7002, F7003, F7005-F7010	DTL1041

CAPACITORS

	C7002, C7004-C7006, C7032 (100/16)	ACH1430
	C7009, C7011, C7013, C7015	CCSRCH101J50
	C7016	CCSRCH331J50
	C7018, C7020	CEHVKW220M16
	C7001, C7031	CKSQYB334K50
	C7019	CKSRYB103K50
	C7003, C7007, C7008, C7010, C7012	CKSRYB104K25
	C7014, C7017, C7021-C7028, C7033	CKSRYB104K25

RESISTORS

	R7042-R7053	RAB4CQ470J
	R7008	RS1/10SR1801F
	R7011, R7025	RS1/10SR2001F
	R7012	RS1/10SR3900F
	R7024	RS1/10SR5100F
	R7039, R7054	RS1/8SQ0R0J
	Other Resistors	RS1/10S###J

OTHERS

	CN7001 DVI CONNECTOR	AKP1282

MAIN BLOCK10

SEMICONDUCTORS

	IC8001	PE5525A
⚠	IC8003	PQ1MX55M2SPQ
⚠	IC8002	SI-3011ZD
	D8001, D8002	DAN202U

COILS AND FILTERS

	L8001-L8004 CHIP COIL	BTH1104
	F8001-F8003 CHIP BEEDS FILTER	BTX1041
	F8004, F8005 CHIP SOLID INDUCTOR	DTL1041

CAPACITORS

	C8006 (2.2/16)	ACG1133
	C8003, C8007, C8022 (100/16)	ACH1430
	C8001	CEHVKW470M16
	C8038, C8041, C8044, C8056	CEHVKW470M6R3
	C8047, C8049	CKSRYB103K50
	C8002, C8004, C8008-C8021	CKSRYF104Z50
	C8023-C8037, C8039, C8040	CKSRYF104Z50
	C8042, C8043, C8045, C8046, C8048	CKSRYF104Z50
	C8050, C8051, C8055, C8057	CKSRYF104Z50

RESISTORS

	R8045-R8051	RAB4CQ101J
	R8004	RS1/10SR1002F
	R8044	RS1/10SR1302F
	R8043	RS1/10SR3001F
	R8003	RS1/10SR3901F
	R8006-R8008, R8033	RS1/8SQ1R0J

Mark	No.	Description	Part No.
		Other Resistors	RS1/10S###J
		OTHERS	
	⚠	FU8002 PROTECTOR(1A)	AEK1073
	⚠	FU8001, FU8003 PROTECTOR(6.3A)	AEK1084
	⚠	X8002 (148MHz) CRYSTAL	ASS1198
	⚠	X8001 (90MHz) CRYSTAL	ASS1199

MAIN BLOCK11

SEMICONDUCTORS

		IC8101-IC8104	K4S643232H-TC60
		IC8105	PD6545A

COILS AND FILTERS

		F8101-F8105 CHIP SOLID INDUCTOR	DTL1041

CAPACITORS

		C8106, C8117, C8129, C8140 (2.2 /16)	ACG1133
		C8101-C8105, C8107-C8116	CKSRYF104Z50
		C8118-C8128, C8130-C8139	CKSRYF104Z50
		C8141-C8151	CKSRYF104Z50

RESISTORS

		R8108	RAB4CQ103J
		Other Resistors	RS1/10S###J

MAIN BLOCK12

SEMICONDUCTORS

		IC8503	TC74LCX157FTS1
		IC8501	THC63LVD103F
		Q8503, Q8504	2SC4081

COILS AND FILTERS

		F8501 CHIP BEEDS FILTER	BTX1041
		F8503 CHIP SOLID INDUCTOR	DTL1041

CAPACITORS

		C8501 (100/16)	ACH1430
		C8506, C8507	CKSRYB103K50
		C8502-C8505, C8508, C8510	CKSRYB104K25

RESISTORS

		Other Resistors	RS1/10S###J

OTHERS

		CN8501 CONNECTOR	AKM1340
		CN8502 20P CONNECTOR	AKM1343

MAIN BLOCK13

SEMICONDUCTORS

		IC9002	PQ200WNA1ZPH
	⚠	IC9001	PQ20WZ11
		Q9003, Q9004	2SA1576A
		Q9001, Q9002, Q9007	2SC4081
		Q9008	DTC144EUA
		D9001, D9003, D9005	DAN202U
		D9006	DAN217U

COILS AND FILTERS

		F9002, F9003, F9010, F9011	BTX1041

CAPACITORS

		C9003 (1000/10)	ACH1431
		C9009	CEHVKW330M25
		C9002	CEHVKW470M16
		C9008	CKSQYB105K16
		C9007	CKSRYB103K50
		C9010	CKSRYB104K25
		C9001	CKSRYF104Z50

RESISTORS

		R9020	RS1/10SR1502F
		R9018, R9109	RS1/10SR2001F
		R9108	RS1/10SR2702F
		R9107	RS1/10SR3301F
		R9019	RS1/10SR5601F
		R9021	RS1/10SR6801F
		R9032, R9043-R9054, R9069-R9080	RS1/8SQ0R0J
		R9082-R9084, R9090-R9101	RS1/8SQ0R0J
		R9037, R9038	RS1/8SQ102J
		R9027, R9028	RS1/8SQ221J
		R9033	RS1/8SQ470J
		Other Resistors	RS1/10S###J

OTHERS

	⚠	FU9001, FU9003 PROTECTOR(4.5A)	AEK1082
	⚠	FU9002 PROTECTOR(6.3A)	AEK1084
		CN9003, CN9004, CN9011 CONNECTOR	AKM1274
		CN9007 CONNECTOR	AKM1277
		CN9006, CN9012 CONNECTOR	AKM1278
		CN9008 CONNECTOR	AKM1279
		CN9001 CONNECTOR	AKM1280
		CN9010 40P TOP CONNECTOR	AKM1342
		KN9001-KN9004 GROUND PLATE	ANK1664

VSIF ASSY

SEMICONDUCTORS

		IC4001	24LC01B
	⚠	IC4002	LM75BIMX-3
		IC4003	PQ200WNA1ZPH
		Q4004	2SC4081
		Q4005	DTC144EUA
		Q4001-Q4003	HN1A01FU
		D4022	DAN217U
		D4020, D4021	UDZS5R6(B)

COILS AND FILTERS

		F4001 CHIP SOLID INDUCTOR	OTL1046

CAPACITORS

		C4001 (4.7/16)	ACG1134
		C4025	CCSRCH101J50
		C4024	CCSRCH151J50
		C4023	CCSRCH181J50
		C4026, C4027	CCSRCH271J50
		C4029	CEHVKW330M25
		C4033, C4034	CKSQYB474K25
		C4028	CKSRYB103K50
		C4002-C4007, C4020, C4022, C4030	CKSRYB104K25
		C4035	CKSRYB104K25

RESISTORS

		R4004	RS1/10SR1001F
		R4005, R4010, R4015	RS1/10SR1002F
		R4008, R4013, R4018	RS1/10SR1202F
		R4007, R4012, R4017	RS1/10SR1502F

Mark No.	Description	Part No.
R4046		RS1/10SR2001F
R4002		RS1/10SR2201F
R4009, R4014		RS1/10SR3302F
R4022, R4024		RS1/10SR4701F
R4045		RS1/10SR8201F
R4047-R4050		RS1/8SQ0R0J
Other Resistors		RS1/10S###J

OTHERS

FU4001	PROTECTOR(6.3A)	AEK1084
CN4001	CONNECTER	AKM1299
CN4005	20P CONNECTER	AKM1343
CN4002-CN4004	50P CONNECTER	AKM1345
CN4006	PCISOKET184	AKP1251
KN4001, KN4002	GROUND PLATE	ANK1664

SENB ASSY

SEMICONDUCTORS

⚠IC1001		LM75BIMX-3

COILS AND FILTERS

F1001, F1003	CHIP SOLID INDUCTOR	OTL1046

CAPACITORS

C1003	CCSRCH151J50
C1005	CCSRCH181J50
C1002	CKSRYB104K25

RESISTORS

R1003	RS1/8SQ0R0J
Other Resistors	RS1/10S###J

OTHERS

CN1001	CONNECTOR	AKM1279

SENC ASSY

SEMICONDUCTORS

⚠IC1101		LM75BIMX-3

COILS AND FILTERS

F1101-F1103	CHIP SOLID INDUCTOR	OTL1046

CAPACITORS

C1105	CCSRCH271J50
C1103	CCSRCH391J50
C1102	CKSRYB104K25

RESISTORS

Other Resistors	RS1/10S###J

OTHERS

CN1101	CONNECTOR	AKM1275

SEND ASSY

SEMICONDUCTORS

⚠IC1201		LM75BIMX-3

COILS AND FILTERS

F1201, F1203	CHIP SOLID INDUCTOR	OTL1046

CAPACITORS

C1205	CCSRCH181J50
C1203	CCSRCH391J50
C1202	CKSRYB104K25

RESISTORS

R1203	RS1/8SQ0R0J
Other Resistors	RS1/10S###J

OTHERS

CN1201	CONNECTOR	AKM1279

AUDIO ASSY

SEMICONDUCTORS

⚠IC3002	M61571AFP
⚠IC3004	NJM78M09DL1A
IC3001	R2S15900
Q3003, Q3005, Q3006, Q3008	2SA1576A
Q3004, Q3009	2SC4081
Q3007	DTC143ZUA
D3001	DAN217U
⚠D3003-D3006	RB160M-40
D3007	RD10S(B3)

COILS AND FILTERS

L3001-L3004	COIL	ATH1189
L3005, L3006	CHIP COIL	BTH1102
F3006-F3009	CHIP BEEDS FILTER	BTX1041
F3001-F3003	CHIP SOLID INDUCTOR	OTL1046

CAPACITORS

C3045, C3046, C3051, C3052 (1p/50)	ACG1130
C3074, C3075 (1.0/16)	ACG1132
C3076, C3077 (2.2/16)	ACG1133
C3001, C3057 (100/16)	ACH1430
C3033, C3039, C3054 (220/16)	ACH1432
C3005, C3012	CCSQCH822J50
C3070	CCSRCH102J50
C3020, C3025	CCSRCH220J50
C3017, C3018, C3027, C3028	CCSRCH560J50
C3016, C3019, C3026, C3029	CCSRCH561J50
C3078	CEHANP101M16
C3022	CEHVKW100M16
C3072	CEHVKW220M16
C3023	CEHVKW470M16
⚠C3066-C3069	CFTLA104J50
C3043, C3044, C3048, C3049	CFTLA474J50
C3002, C3015, C3030, C3031	CKSQYB105K16
C3036, C3037, C3042	CKSQYB105K16
C3082	CKSRYB103K50
C3024, C3032, C3034, C3038, C3040	CKSRYB104K25
C3055, C3056, C3063, C3071	CKSRYB104K25
C3083, C3084	CKSRYB104K50
C3008	CKSRYB153K50
C3009, C3021	CKSRYB224K16
C3006, C3007, C3010, C3011	CKSRYB683K50

RESISTORS

R3023 (0.10/3W)	ACN1243
R3024, R3067 (0.16/3W)	ACN1244
R3015, R3018	RS1/10SR1502F

Mark	No.	Description	Part No.
		R3014, R3019	RS1/10SR3902F
		R3061-R3066	RS1/8SQ0R0J
A		R3054, R3056, R3059, R3060	RS1/8SQ103J
		R3005, R3006	RS1/8SQ221J
		R3003, R3004	RS1/8SQ822J
		Other Resistors	RS1/10S###J
		OTHERS	
	⚠CN3001	SPEAKER TERMINAL 4-P	AKE1062
	CN3003	CONNECTOR	AKM1277
	CN3004	CONNECTOR	AKM1280
	KN3001-KN3003	GROUND PLATE	ANK1664

COMMSLOT ASSY

SEMICONDUCTORS

B		IC2003	MAX3222IPER
		IC2001, IC2002	MC74VHCT132ADT
		IC2004, IC2005	TC74VHC00FT
		IC2006, IC2007	TC74VHC125FT
		D2011-D2014	DAN217U

CAPACITORS

		C2001-C2007	CCSRCH101J50
		C2014, C2015, C2019-C2021	CCSRCH471J50
		C2018	CEHVKW470M16
C		C2009, C2010	CKSRYB104K25
		C2008, C2011-C2013, C2016, C2017	CKSRYB104K50
		C2022-C2024	CKSRYB104K50

RESISTORS

		R2019, R2020	RS1/8SQ0R0J
		Other Resistors	RS1/10S###J

OTHERS

	2005	SCREW	ABA1318
	2003	RIVET (PLASTIC)	AEP-211
D	CN2001	9P D-SUB SOCKET	AKP1213
	JA2002, JA2003	6PIN MINI-DIN JACK	AKP1254
	2004	PROTECT SHEET 92	AMR3401
	2002	SLOT PANEL 92	ANG2611
	2006	HEXAGON HEADED SCREW	BBA1051
	2001	SCREW TERMINAL	VNE1949

COMMSLOT IF ASSY

SEMICONDUCTORS

		IC2301	TC74VHC00FT
E		Q2301, Q2351	2SC4081
		Q2302	DTC144EUA
		Q2350	HN1A01FU

CAPACITORS

		C2350, C2351	CKSRYB104K25
		C2301	CKSRYB104K50

RESISTORS

		R2354	RS1/10SR1002F
		R2351, R2353	RS1/10SR1202F
		R2350	RS1/10SR1502F
F		R2355	RS1/10SR2201F
		R2313	RS1/8SQ0R0J
		Other Resistors	RS1/10S###J

Mark	No.	Description	Part No.
		OTHERS	
	CN2302	40P SIDE CONNECTOR	AKM1347
	CN2303	EDGE CARD CONN	AKP1252

KEY ASSY

SEMICONDUCTORS

		IC2201	PD5719A
		Q2201	2SC4081
		D2201	1SS355

SWITCHES AND RELAYS

		S2201-S2208	ASG1088

CAPACITORS

		C2203, C2204, C2208	CCSRCH101J50
		C2207	CEHVKW470M6R3
		C2206	CKSRYB104K50
		C2201, C2202, C2205	CKSRYB472K50

RESISTORS

		R2210	RAB4CQ182J
		R2204, R2207	RS1/10SR2202F
		Other Resistors	RS1/10S###J

OTHERS

	⚠X2201 (3.84MHz)	CERALOCK	ASS1162
	CN2201	3PIN CONNECTOR	S3B-EH

LED2 ASSY

SEMICONDUCTORS

		Q2406	2SA1576A
		Q2403-Q2405	2SC4081
		Q2401	HN1B04FU
		D2401	S9561
		D2402	SPR-39MVWF

CAPACITORS

		C2407, C2408	CEHVKW470M16
		C2401, C2405, C2409	CKSRYB104K25
		C2402-C2404	CKSRYF105Z16

RESISTORS

		R2416-R2419	RS1/8SQ130J
		Other Resistors	RS1/10S###J

OTHERS

	CN2401	CONNECTOR	AKM1294

42 ADDRESS ASSY [42 ADR LOGIC BLOCK]

SEMICONDUCTORS

		IC1501	PEE002A

COILS AND FILTERS

	L1504	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

		C1502 (47/6.3)	ACH1357
		C1557	CCSSCH470J50
		C1501	CKSRYB105K6R3
		C1509, C1510	CKSSYB102K50

Mark No.	Description	Part No.
	C1503-C1507, C1552-C1555	CKSSYF104Z16
RESISTORS		
	R1505-R1509	RS1/16SS1000F
	R1530, R1531	RS1/16S0R0J
	Other Resistors	RS1/16SS###J
OTHERS		
CN1501	40P CONNECTOR	AKM1217
CN1502	4P CONNECTOR	AKM1290

[42 ADR RESONANCE BLOCK]

Mark No.	Description	Part No.
SEMICONDUCTORS		
	IC1601, IC1602	TND307TD
	Q1612	2SA1163
	Q1602, Q1609	HAT1110R
	Q1601, Q1610	HAT3021R
	Q1606, Q1608, Q1611	QSZ2
	Q1613, Q1614	RN1901
	D1612	1SS302
	D1625, D1628	1SS355
	D1604, D1605, D1622, D1623	CRH01
	D1602, D1603, D1620, D1621	EC10UA20
	D1601, D1606, D1618, D1619	UDZS15(B)
COILS AND FILTERS		
L1601, L1604	INDUCTOR	ATH1135
CAPACITORS		
	C1609 (0.1/100)	ACG1098
	C1601, C1614 (0.1/100)	ACG1124
	C1602-C1605 (56/80)	ACH1405
	C1613	CKSRYB104K25
	C1619	CKSYB105K16
RESISTORS		
	R1630, R1631	RS1/16S103J
	R1601, R1602, R1612, R1617	RS1/16S104J
	R1622, R1623, R1628, R1629	RS1/16S220J
	R1633	RS1/16S222J
	R1632	RS1/16S472J
	R1608	RS1/16S4R7J
	Other Resistors	RS1/16SS###J

42 SCAN A ASSY

Mark No.	Description	Part No.
SEMICONDUCTORS		
	IC2701-IC2706	SN755870PZT
	IC2707	TC7SH08FUS1
	D2701-D2707	1SS355
CAPACITORS		
	C2701, C2711, C2721, C2731, C2741	ACG1125
	C2751 (0.22/250)	ACG1125
	C2710, C2720, C2730, C2740, C2750	CCSRCH181J50
	C2760	CCSRCH181J50
	C2708, C2709, C2718, C2719	CCSRCH331J50
	C2728, C2729, C2738, C2739	CCSRCH331J50
	C2748, C2749, C2758, C2759	CCSRCH331J50
	C2705-C2707, C2715-C2717	CCSRCH390J50
	C2725-C2727, C2735-C2737	CCSRCH390J50
	C2745-C2747, C2755-C2757	CCSRCH390J50
	C2703, C2713, C2723, C2733, C2743	CKSRYB105K6R3
	C2753	CKSRYB105K6R3
RESISTORS		
	R2705, R2710, R2713, R2716, R2719	RAB4C221J
	R2722	RAB4C221J
	Other Resistors	RS1/16S###J
OTHERS		
CN2702	3P CONNECTOR	AKM1274
CN2701	13P CONNECTOR	AKP1261
	K2701-K2703, K2705, K2707, K2709	AKX9002
	K2711, K2712 TEST PIN	AKX9002

42 SCAN B ASSY

Mark No.	Description	Part No.
SEMICONDUCTORS		
	IC2801-IC2806	SN755870PZT
	IC2807	TC7SH08FUS1
	D2801-D2807	1SS355
CAPACITORS		
	C2801, C2811, C2821, C2831, C2841	ACG1125
	C2851 (0.22/250)	ACG1125
	C2810, C2820, C2830, C2840, C2850	CCSRCH181J50
	C2860	CCSRCH181J50
	C2808, C2809, C2818, C2819	CCSRCH331J50
	C2828, C2829, C2838, C2839	CCSRCH331J50
	C2848, C2849, C2858, C2859	CCSRCH331J50
	C2805-C2807, C2815-C2817	CCSRCH390J50
	C2825-C2827, C2835-C2837	CCSRCH390J50
	C2845-C2847, C2855-C2857	CCSRCH390J50
	C2803, C2813, C2823, C2833, C2843	CKSRYB105K6R3
	C2853, C2861	CKSRYB105K6R3
RESISTORS		
	R2803, R2808, R2811, R2814, R2817	RAB4C221J
	R2820	RAB4C221J
	Other Resistors	RS1/16S###J
OTHERS		
CN2802	3P CONNECTOR	AKM1274
CN2801	13P CONNECTOR	AKP1261
	K2801-K2803, K2805, K2807, K2809	AKX9002
	K2811, K2812 TEST PIN	AKX9002

SUS CLAMP 1 ASSY

Mark No.	Description	Part No.
SEMICONDUCTORS		
	D1631	DF20L60U
CAPACITORS		
	C1632 (1.2/250)	ACE1179
OTHERS		
KN1632	GROUND PLATE	ANK-142
CN1631	3P TOP POST	B3B-EH
KN1631	WRAPPING TERMINAL	VNF1084

SUS CLAMP 2 ASSY

Mark No.	Description	Part No.
SEMICONDUCTORS		
	D1641	DF20L60U

Mark	No.	Description	Part No.
		CAPACITORS	
	C1642 (1.2/250)		ACE1179
		OTHERS	
	KN1642	GROUND PLATE	ANK-142
	CN1641	3P TOP POST	B3B-EH
	KN1641	WRAPPING TERMINAL	VNF1084

X DRIVE ASSY

OTHERS

	1002	DRIVE RADIATION SHEET	AEH1092
	1001	DRIVE HEATSINK X	ANH1637
	1002	DRIVE HEATSINK K	ANH1639
	1001	SCREW	BMZ30P080FTC

[42 X LOGIC BLOCK]

SEMICONDUCTORS

IC1001		TC74ACT541FT
IC1002		TC74VHC00FTS1
	CAPACITORS	
C1003		CEHAT470M16
C1001, C1002		CKSRYB104K16
	RESISTORS	
R1001, R1003		RAB4C470J
R1008, R1009		RAB4C472J
Other Resistors		RS1/16S###J
	OTHERS	
CN1001	18P CONNECTOR	VKN1310

[42 X RESONANCE BLOCK]

SEMICONDUCTORS

IC1101		AXF1145
IC1141		BA10393F
Q1141		2SC4116
D1101-D1105		D1FL40
	COILS AND FILTERS	
L1101, L1102	CHOKE COIL	ATH1155
L1103-L1106	CHOKE COIL	ATH1193
	CAPACITORS	
C1161-C1164, C1166 (3.3/250)		ACE1168
C1101, C1112, C1113 (0.22/250)		ACG1112
C1121 (470P/63V)		ACG1126
C1167, C1168 (3300p/630)		ACG1129
C1105 (1000p/630)		CCG1186
C1141, C1142, C1144, C1145		CKSRYB104K16
C1102, C1146		CKSRYB105K6R3
C1103		CKSYB105K25
	RESISTORS	
R1101 (3.3/1/2W)		ACN1168
R1106 (10/1/2W)		ACN1252
R1142, R1146		RS1/10S1003F
R1122, R1123		RS1/10S104J
R1148, R1150		RS1/16S5601F
R1151, R1155		RS1/16S6801F
R1121		RS2MMF100J
Other Resistors		RS1/16S###J

[42 X SUS BLOCK]

SEMICONDUCTORS

IC1202	AXF1143
IC1201	MM1565AF
IC1252	PS9117
IC1251	TND301S
IC1271	TND307TD
Q1251	2SC2412K
Q1272	2SK3325-Z
D1281	1SS302
D1201	1SS355
D1252	CRH01
D1282	UDZS16(B)
D1251	UDZS5R6(B)

COILS AND FILTERS

L1204, L1211 INDUCTOR	ATH1186
F1201 INDUCTOR	CTF1449
L1201, L1205, L1231	LFEA100J

CAPACITORS

C1214-C1217 (2.2/250)	ACE1178
C1211, C1225-C1227, C1297, C1298 (3300p/630)	ACG1129
C1212, C1213 (280/250)	ACH1424
C1231	CEHAT101M10
C1206	CEHAT101M25
C1283	CEHAT2R2M2E
C1208	CEHAT470M16
C1222, C1272	CEHAT470M25
C1221	CKSRYB105K6R3
C1204, C1207, C1223, C1251, C1253	CKSRYF104Z50
C1273	CKSRYF104Z50
C1220	CKSYB105K25

RESISTORS

R1204 (2.2/1/2W)	ACN1166
R1213 (3.3/1/2W)	ACN1168
R1276, R1277	RS3LMF331J
Other Resistors	RS1/16S###J

OTHERS

KN1201-KN1206, KN1208-KN1211	ANK-142
CN1202 3P TOP POST	B6B-EH
CN1201 8P TOP POST	B8B-EH

[42 X D-D CON BLOCK]

SEMICONDUCTORS

IC1321	PS2701A-1(L)
IC1326	TA76431FR
Q1324	2SA1037K
Q1302	2SC4081
Q1301, Q1323	2SD1898
Q1321, Q1325, Q1351	HN1C01FU
D1303, D1324	1SS301
D1304, D1307, D1325, D1328	1SS355
D1301, D1302, D1326, D1327	CRH01
D1321	D1FK60
D1329, D1330	UDZS4R7(B)
D1306, D1323, D1331	UDZS5R1(B)

Mark	No.	Description	Part No.
COILS AND FILTERS			
	T1301	SWITCHING TRANS.	ATK1159
	T1321	SWITCHING TRANS.	ATK1160
CAPACITORS			
	C1325 (22/250)		ACH1428
	C1326		CEHAT100M50
	C1302, C1321		CEHAT101M25
	C1301, C1303, C1323		CKSRYB103K50
	C1304, C1306, C1327		CKSRYB104K16
	C1307, C1324		CKSYB105K25
RESISTORS			
	R1337		RAB4C472J
	R1321, R1322, R1326, R1339		RS1/10S224J
	VR1321		CCP1392
	Other Resistors		RS1/16S###J

42Y DRIVE ASSY

OTHERS

	2001	DRIVE RADIATION SHEET	AEH1092
	2001	PLATE Y	ANG2790
	2001	DRIVE HEATSINK Y	ANH1638
	2002	DRIVE HEATSINK K	ANH1639
	2002	SCREW	BMZ30P080FTC
	2001	SCREW	PMB30P060FTC

[42Y LOGIC BLOCK]

SEMICONDUCTORS

	IC2002		TC74ACT540FT
	IC2001, IC2004		TC74ACT541FT
	IC2003, IC2005		TC74VHC08FTS1
CAPACITORS			
	C2003		CEHAT470M16
	C2001, C2002, C2004-C2006		CKSSYB104K10
RESISTORS			
	R2003, R2006		RAB4C101J
	R2001, R2002, R2017, R2021		RAB4C470J
	R2004, R2005, R2019, R2020		RAB4C472J
	Other Resistors		RS1/16S###J
OTHERS			
	CN2001	40P CONNECTOR	AKM1217

[42Y RESONANCE BLOCK]

SEMICONDUCTORS

	IC2101		AXF1145
	IC2141		BA10393F
	Q2141		2SC4081
	D2101-D2105		D1FL40
COILS AND FILTERS			
	L2101, L2102	CHOKE COIL	ATH1155
	L2103-L2106	CHOKE COIL	ATH1193
CAPACITORS			
	C2131-C2134, C2136 (3.3/250)		ACE1168
	C2103, C2107, C2108 (0.22/250)		ACG1112
	C2104, C2106 (470p/630)		ACG1126
	C2109-C2112 (3300p/630)		ACG1129
	C2101, C2145		CKSRYB105K6R3
	C2141, C2143, C2144		CKSSYB104K10
	C2102		CKSYB105K25
RESISTORS			
	R2101 (10.0/1/2W)		ACN1174
	R2108 (10.0/3W)		ACN1241
	R2142, R2143		RS1/10S1003F
	R2103, R2107		RS1/10S104J
	R2146, R2149		RS1/16S5601F
	R2147, R2151		RS1/16S6801F
	R2102		RS2MMF100J
	Other Resistors		RS1/16S###J

[42Y SUS BLOCK]

SEMICONDUCTORS

	IC2252, IC2253		AXF1144
	IC2350		MM1565AF
	IC2250		PS9117
	IC2231, IC2251		TND301S
	IC2203, IC2221		TND307TD
	Q2202		2SA2142
	Q2250		2SC4081
	Q2290		2SK3050
	Q2221		2SK3325-Z
	Q2280, Q2281		2SK3399
	D2233		1SS301
	D2213		1SS302
	D2203, D2212, D2351		1SS355
	D2202, D2204, D2205, D2234		CRH01
	D2251, D2252, D2272		CRH01
	D2211		D1FK60
	D2232, D2271		UDZS16(B)
	D2250		UDZS5R6(B)
COILS AND FILTERS			
	L2353	INDUCTOR	ATH1186
	F2301-F2320	FERRITE BEAD	ATX1055
	F2352	INDUCTOR	CTF1449
	L2350, L2351, L2354		LFEA100J
CAPACITORS			
	C2330, C2335, C2341, C2342 (2.2/250)		ACE1178
	C2231 (0.33/100)		ACG1118
	C2271, C2272 (0.1/100)		ACG1124
	C2203-C2206 (3300p/630)		ACG1129
	C2336, C2337 (280/250)		ACH1424
	C2270 (270/100)		ACH1426
	C2226 (3,3/400)		ACH1427
	C2207		CCSRCH102J50
	C2355, C2369		CEHAT101M10
	C2357		CEHAT470M16
	C2208, C2221, C2339, C2364		CEHAT470M25
	C2356		CKSRYB104K16
	C2353, C2358, C2359		CKSRYB105K6R3
	C2363		CKSRYB473K16
	C2209, C2222, C2230, C2252		CKSRYF104Z50
	C2250		CKSSYB104K10
	C2354, C2360		CKSYB105K25
RESISTORS			
	R2352 (2,2/1/2W)		ACN1166

Mark No.	Description	Part No.
	R2304 (10.0/1/2W)	ACN1174
	R2360, R2362 (22/1/2W)	ACN1178
	R2210, R2211	RS1/10S151J
A	R2290	RS1MMF471J
	R2222, R2224	RS2MMF5R6J
	R2203	RS3LMF152J
	R2277-R2281	RS3LMF8R2J
	Other Resistors	RS1/16S###J

OTHERS

	KN2350, KN2352, KN2354, KN2356	ANK-142
	KN2357, KN2359-KN2363	ANK-142
	CN2351, CN2352 KR CONNECTOR	B4B-PH-K
	CN2350 9P TOP POST	B9B-EH

B

[42 Y SCAN BLOCK]

SEMICONDUCTORS

	IC2403, IC2405, IC2406, IC2408	PS9117
	IC2401	PS9851-2(P)
	IC2409, IC2410	PST3638UR
	IC2402, IC2407	TC74ACT540FT
	D2402	CRH01

COILS AND FILTERS

	F2401-F2404 CHIP BEADS FILTER	ATX1059
	L2401-L2403	LFEA100J

C

CAPACITORS

	C2404, C2411 (47/160)	ACH1406
	C2401, C2407, C2414	CEHAT101M10
	C2416, C2417	CKSRYB102K50
	C2402, C2403, C2405, C2408-C2410	CKSSYB104K10
	C2412	CKSSYB104K10

RESISTORS

	R2407, R2421	RAB4C220J
	Other Resistors	RS1/16S###J

D

OTHERS

	CN2401, CN2402 15P CONNECTOR	AKM1200

[42 Y VH D-D CON BLOCK]

SEMICONDUCTORS

	IC2531	BA10358F
	IC2502	MIP2E3DMC
	IC2503	PS2701A-1(L)
	IC2534, IC2535	TA76431FR
	Q2533	2SC2412K
E	Q2531	2SC3425
	Q2532	2SD2568
	Q2511	HN1C01FU
	D2534	1SS355
	D2522, D2524	CRH01
	D2523, D2532	D1FK60
	D2533	UDZS33(B)
	D2536	UDZS4R7(B)
	D2530, D2531	UDZS8R2(B)

COILS AND FILTERS

	T2503 CONVERTER TRANS.	ATK1158
F	L2501	LFEA101J

CAPACITORS

	C2531 (0.01/400)	ACE1177
	C2516 (100/160)	ACH1360
	C2532 (10/400)	ACH1425
	C2513 (22/250)	ACH1428
	C2520	CEHAT101M16
	C2515	CEHAT101M25
	C2528	CEHAT221M16
	C2514, C2525, C2534	CKSRYB104K16
	C2521, C2533, C2535	CKSRYB104K25

RESISTORS

	R2553	RAB4C472J
	R2558	RS1/10S0R0J
	R2533, R2556	RS1/10S104J
	R2534, R2535, R2541	RS1/10S2203F
	R2548	RS1/16S1003F
	R2550	RS1/16S1802F
	R2549, R2557	RS1/16S4702F
	R2542, R2545	RS1/16S5601F
	VR2503	CCP1390
	VR2531	CCP1392
	Other Resistors	RS1/16S###J

[42 Y D-D CON BLOCK]

SEMICONDUCTORS

	IC2602	BA10358F
	IC2601, IC2603, IC2606	PS2701A-1(L)
	IC2605, IC2614	TA76431FR
	Q2610	2SA1163
	Q2601, Q2609	2SA1576A
	Q2608	2SA2005
	Q2607	2SC2713
	Q2612	2SC4081
	Q2605, Q2606	2SD1898
	Q2603, Q2604, Q2611	DTC143EUA
	Q2602, Q2613, Q2641	HN1C01FU
	D2611	1SS226
	D2604, D2612	1SS301
	D2602, D2613-D2615	1SS355
	D2601, D2603, D2609, D2618	CRH01
	D2610	D1FL40
	D2617	UDZS15(B)
	D2607, D2608	UDZS4R7(B)
	D2605	UDZS5R1(B)
	D2616	UDZS5R6(B)

COILS AND FILTERS

	T2602 CONVERTER TRANS.	ATK1156
	T2601 SWITCHING TRANS.	ATK1161

CAPACITORS

	C2608, C2610	CEHAT101M25
	C2613	CEHAT221M25
	C2606	CEHAT221M6R3
	C2607	CKSRYB102K50
	C2605, C2612, C2614	CKSRYB103K50
	C2601, C2604, C2609	CKSRYB104K16
	C2602, C2615	CKSRYB105K6R3
	C2603	CKSRYF104Z50
	C2611	CKSSYB104K10

RESISTORS

	R2613	RAB4C472J

Mark No.	Description	Part No.
R2641, R2642		RS1/10S224J
R2629		RS1/16S1002F
R2625, R2626		RS1/16S1501F
R2608, R2612, R2630, R2632, R2635		RS1/16S4701F
R2618		RS1/16S4702F
R2636		RS1/16S5601F
R2652		RS1/16S6801F
R2627		RS3LMF151J
VR2601		CCP1390
Other Resistors		RS1/16S###J

MD DIGITAL ASSY
[MD FRONT RX BLOCK]

SEMICONDUCTORS

IC3001	DS90CF388VJD
IC3007	SN74AHC08PW
IC3004	SN74AHC541PW
IC3005	TC74VHC123AFTS1
IC3009	TC7SH08FUS1
IC3006, IC3008	TC7SZ00FU
Q3005	DTC143EUA
Q3006	RN1901
D3020, D3021	1SS355
D3004	DAN202U
D3001	SML-310LT
D3002	SML-310MT

COILS AND FILTERS

F3001-F3003 EMI FILTER	ATF1213

CAPACITORS

C3001, C3012, C3015 (10/16)	ACH1369
C3022, C3052	CCSRCH102J50
C3044	CCSSCH101J50
C3051	CKSRYB105K6R3
C3002-C3007, C3009, C3017, C3019	CKSRYF103Z50
C3046	CKSRYF103Z50
C3008, C3010, C3011, C3013, C3014	CKSRYF104Z16
C3016, C3018, C3020, C3021	CKSRYF104Z16
C3031, C3032, C3035, C3037, C3043	CKSRYF104Z16
C3029, C3050	CKSSYF104Z16

RESISTORS

R3020	RAB4C103J
R3007	RAB4C220J
R3056	RS1/16S0R0J
R3001, R3002, R3080-R3088	RS1/16S101J
R3014	RS1/16S220J
R3037	RS1/16S472J
Other Resistors	RS1/16SS###J

OTHERS

CN3001 31P CONNECTOR	AKM1239
CN3002 20P CONNECTOR	AKM1343
K3002, K3003 TEST PIN	AKX9002
KN3001 GROUND PLATE	ANK1664

[MD MODULE UCOM BLOCK]

SEMICONDUCTORS

Mark No.	Description	Part No.
IC3161		24LC02B(I)SN
IC3156		BR24L04FJ-W
IC3151		M30620FCPGP-U5C
IC3157		M62334FP
IC3154, IC3158		MM1522XU
IC3155		SN74AHC08PW
IC3152, IC3153		SN74AHC541PW
IC3160		TC74VHC123AFTS1
IC3159		TC7W126FU
Q3151		2SJ461A
D3156, D3159-D3161		1SS355
D3151, D3152, D3154, D3155, D3158		DAN202U
D3299		SML-310MT

CAPACITORS

C3151, C3169 (47/6.3)	ACH1357
C3164	CCSSCH101J50
C3171, C3172	CKSRYB105K6R3
C3180	CKSRYF104Z16
C3152, C3153, C3155-C3163	CKSSYF104Z16
C3165-C3168, C3170	CKSSYF104Z16

RESISTORS

R3160, R3176	RAB4C101J
R3174	RAB4C103J
R3183, R3189	RS1/16S0R0J
R3230, R3231	RS1/16S101J
Other Resistors	RS1/16S###J

OTHERS

X3151 (16MHz)	ASS1178
CN3152 CONNECTOR	CKS4828

[MD PANEL FLASH BLOCK]

SEMICONDUCTORS

IC3301	MBM29PL160TD75TN
IC3304	PST3610UR
IC3302, IC3305	PST3628UR
IC3303	SN74AHC08PW
Q3302	HN1C01FU
Q3301	RN1901

CAPACITORS

C3311	CCSRCH470J50
C3317	CCSRCH471J50
C3315	CKSRYB104K16
C3304, C3307, C3309	CKSRYB472K50
C3305, C3310	CKSSYB102K50
C3301-C3303, C3306, C3308, C3316	CKSSYF104Z16

RESISTORS

R3307, R3308	RAB4C101J
Other Resistors	RS1/16SS###J

OTHERS

X3302 (102.5MHz)	ASS1188
CN3301 CONNECTOR	CKS4835

[MD ASTRA BLOCK]

SEMICONDUCTORS

IC3401	PEG122C

Mark	No.	Description	Part No.

COILS AND FILTERS

F3401, F3402	EMI FILTER	CCG1162
L3401-L3403	CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

C3402, C3419, C3425, C3448 (100/6.3)	ACH1396
C3440-C3447, C3449-C3455	CKSRYB105K6R3
C3403-C3413, C3417, C3418	CKSSYF104Z16
C3420-C3424, C3426-C3433	CKSSYF104Z16
C3456, C3457	CKSSYF104Z16

RESISTORS

R3402, R3412	RAB4C101J
R3405-R3407, R3409, R3410	RAB4C220J
R3416, R3417	RAB4C220J
R3425	RS1/16S5601F
Other Resistors	RS1/16SS###J

OTHERS

K3401, K3402	TEST PIN	AKX9002

[MD ADDRESS BLOCK]

SEMICONDUCTORS

D3501, D3502	DAN202U

CAPACITORS

C3501-C3504	CKSSYB102K50

RESISTORS

R3521, R3522, R3525	RAB4C101J
R3524	RAB4C222J
R3519, R3520	RAB4C472J
Other Resistors	RS1/16SS###J

OTHERS

CN3501-CN3504, CN3506	40P CONNECTOR	AKM1217
CN3505	18P CONNECTOR	VKN1310

[MD DIGI DD CON BLOCK]

SWITCHES AND RELAYS

S3601	ASH1047

CAPACITORS

C3609	CKSSYF104Z16

RESISTORS

R3611	RAB4C101J
Other Resistors	RS1/16SS###J

OTHERS

CN3601	14P CONNECTOR	AKM1300
K3601, K3602	TEST PIN	AKX9002

POWER SUPPLY UNIT

POWER SUPPLY Unit has no service part.

6. ADJUSTMENT

1. At shipment, the unit is adjusted to its best conditions. Normally, it is not necessary to readjust even if an assembly is replaced. If the adjustment is shifted or if it becomes necessary to readjust because of part replacement, etc., perform the adjustment as described below.
2. Any value changed in Service/Factory mode will be stored in memory as soon as it is changed. Before readjustment, take note of the original values for reference in case you need to restore the original settings.
3. Use a stable AC power supply.

6.1 ADJUSTMENT REQUIRED WHEN THE SET IS REPAIRED OR REPLACED

■ When any of the following assemblies is replaced

POWER SUPPLY Unit	No adjustment required
MD DIGITAL Assy	Refer to the "7.1.5 BACKUP WHEN THE MAIN UNIT IS ADJUSTED"
42 X DRIVE Assy	No adjustment required
42 Y DRIVE Assy	No adjustment required
Service Panel	Refer to the "6.7 METHOD FOR REPLACING THE SERVICE PANEL ASSY."
MAIN Assy	Refer to the "ADJUSTMENT"
SUB Assy (Audio, 232C, Sensor, etc.)	No adjustment required
Other assemblies	No adjustment required

■ When any part in the following assemblies is replaced

POWER SUPPLY Unit	The assembly must be replaced as a unit, and no part replacement is allowed.
MD DIGITAL Assy	No adjustment required
42 X DRIVE Assy (IC1101, IC1102)	No adjustment required
42 Y DRIVE Assy (IC2201, IC2202)	No adjustment required
MAIN Assy	The assembly must be replaced as a unit, and no part replacement is allowed except the part of note 1.
SUB Assy (Audio, 232C, Sensor, etc.)	The assembly must be replaced as a unit, and no part replacement is allowed except the part of note 2.
Other assemblies	The assembly must be replaced as a unit, and no part replacement is allowed.

Note 1: MAIN Assy
IC500, IC5002, IC5004, IC5005, IC5007, IC5008, IC5301, IC5304, IC5305, IC5307, IC5603–IC5606, IC5902 , IC5903, IC5904, IC9504, IC6301, IC6302, IC6304, IC8002, IC8003, IC8501, X8001, X8002, X9501

Note 2: SUB Assy
IC3001,IC3002,IC3004,
IC2301,U2401,Q2301,Q2302

6.2 ADJUSTMENT

■ **Adjusting conditions**

Adjustments should be carried out in the procedures below. However, any adjustments other than the below are not required.

- When the "PDP module" is replaced, adjustmentsshould conform to the adjusting items below.
  [HOW TO CLEAR HISTORY DATA] [BACKUP WHEN THE MAIN UNIT IS ADJUSTED]
- When the "MAIN Assy" is replaced, adjustments should conform to the adjusting item of [1, 2] specified below.

1. Adjustments after the replacement of the MAIN Assy (Using the remote control)

1-1. Product serial No. registration

(1) Press the keys in the order of [**PIP SHIFT**] → [**SET**] → [**Clear**] → [**PIP SHIFT**] in order to enter the factory adjustment menu.

(2) Press the [**Clear**] or [**ID No. set**] key to select the [MONITOR INFORMATION] No. menu.
(Example : PDP-425CMX)

```
MONITOR INFORMATION

MODEL NAME
  : PDP-425CMX
SERIAL/NUMBER
  :
SOFT WARE VERSION
  :  C123
USAGE TIME
  : 00000H
T1  025        T2  025
T3  025        T4  - -

[MENU/ENTER] NEXT   [EXIT] PREV 9/10
```

(3) Press the [**SCREEN SIDE**] key 4 times to display a cursor ▮ in the lower column of [SERIAL/NUMBER].

```
MONITOR INFORMATION

MODEL NAME
  : PDP-425CMX          <-- (Caution 1)
SERIAL/NUMBER
  ▮
SOFT WARE VERSION
  : C123                <-- (Caution 2)
USAGE TIME
  : 00000H
T1  025        T2  025
T3  025        T4  - -

[MENU/ENTER] NEXT   [EXIT] PREV 9/10
```

(Caution 1) No modification is possible here because this modification is already finished by 3-2. Factory shipment setting (initial setting).

(Caution 2) No modification is possible here because registration is already finished at the time of shipment in terms of maintenance parts.

(4) Moving the POSITION/CONTROL keys of [▲] and [▼], select the numerals and characters of the serial number that is listed in the serial label located on the rear surface of the product. Register the serial number. (Blank → 0 to 9→A to Z)

(5) Moving the POSITION/CONTROL keys of [◄] and [►], select the next digit by means of a cursor.

(6) Repeat the processes of (4) and (5) above and register the serial number completely.

2-2. Factory shipment setting (Initial setting)

(1) Press the [**CLEAR**] or [**ID SELECT**] key to select the [FUNCTION] menu.

(2) Move the POSITION/CONTROL keys of [▲] and [▼] to the item of [SHIP]. Then, move the POSITION/CONTROL keysof [◄] and [►] to select [DESTINATION ALPHABETS] shown below. (The asterisks * shown below denote the numerals or the characters.)

A/J : PDP-425CMX/LUC5
G : PDP-42MXE10/LDFK5
CKD : PDP-42MXE10/YVXK5

FUNCTION

SCART	OFF	SAFEL MODE	---
SHIP	A	PLE TEST OFF	--
LIMIT-VD	OFF		
LIMIT-PC	ON		
GAMMA MD	12		
VOL OFFSET	2		
PSC-T	OFF	ROTATEPTN	1
EXT-PC	OFF		

[MENU/ENTER] NEXT [EXIT] PREV 10/10

(3) Press the keys in the order of [**MUTE**]→POSITION/CONTROL [▲] → POSITION/CONTROL [▼] →[**MUTE**] to make "Factory shipment setting". When "Factory shipment setting" is executed, the red characters of [**SET**] is shown for about 5 seconds on the right side of the [DESTINATION ALPHABETS]. The setting is finished when these red characters of [**SET**] go out. In regard to the factory shipment setting values, refer to the descriptions given below.

FUNCTION

SCART	OFF	SAFEL MODE	---
SHIP	A	SET PLE TEST OFF	---
LIMIT-VD	OFF	ROTATE PTN	1
LIMIT-PC	ON		
GAMMA MD	10		
VOL OFFSET	2		
PSC-T	OFF		
EXT-PC	OFF		

[MENU/ENTER] NEXT [EXIT] PREV 10/10

(4) Press the keys of the remote control in the order of [**PIP SHIFT**] → [**SET**] → [**CLEAR**] → [**PIP SHIFT**] in order to withdraw from the Factory shipment setting.

[Factory shipment setting values]

1. Initial setting values for the user menu (applicable in common to all models)

MENU	A/J, G, CKD
VOLUME	10step
INPUT MODE	INPUT1
WIDE MODE	FULL
LANGUAGE	ENGLISH
All items intended to recover the initial values through the selection in the user menu	Initial values

[PICTURE RESET] [SCREEN RESET] [FUNCTION RESET (Only Integrator)] in the user menu or Integrator.

2. Field menu initial setup values (applicable in common to all models)

MENU		A/J	G	CKD	J	AW,GW, WW,JW
SERVICE	SHIP	A/J	G	CKD	J	AW,GW, WW,JW
	PSC-LIMIT	OFF	OFF	OFF	OFF	OFF
	LIMIT-PC	ON	ON	ON	ON	ON
	U-SCAN	OFF	OFF	OFF	OFF	OFF
	V-FREQ OT	60Hz	60Hz	60Hz	AUTO	AUTO
	V-FREQ VD	60Hz	60Hz	60Hz	AUTO	AUTO
	SYNCLEVEL1	TTL	TTL	TTL	TTL	TTL
	SYNCLEVEL2	TTL	TTL	TTL	TTL	TTL
	DVI-SEL	HDCP	HDCP	HDCP	HDCP	HDCP
	SUB-ORB	ON	ON	ON	ON	ON
	PIC FREEZE	ON	ON	ON	ON	ON
MONITOR INFORMATION	MODEL NAME	PDP-425CMX/LUC5	PDP-42MXEP/LDEK5	PDP-42MXEI/YVXX5	PX- ***** J	*1

1* MONITOR INFORMATION when SHIP is set to AW, GW, WW, or JW
PX-42XM4/42XR4 series: 42-WXGA

3. Initial setting values for the Factory shipment setting menu

The table shown below specifies only the items that can be changed in the factory adjusting mode.
Therefore, any setting values of the items not specified below cannot be modified.

MENU		A/J	G	CKD	J, JW
FUNCTION	SHIP	A	G	CKD	J or JW
	LIMIT-PC	ON	ON	ON	ON
MONITOR INFORMATION	SERIAL/ NUMBER	-	-	-	-

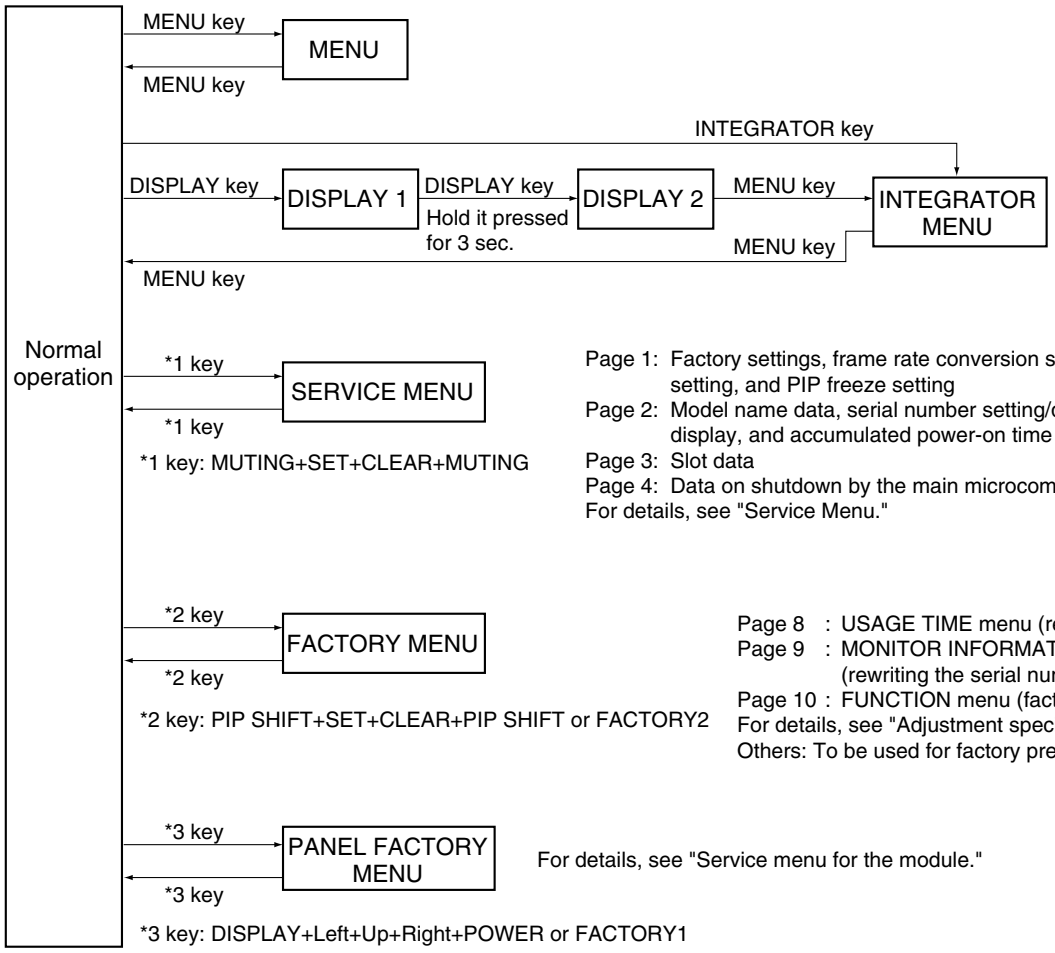
6.3 SERVICE MENU LIST

Three Service Factory modes are provided with this unit:

Service menu: Mainly used for servicing. Display of shutdown data for the MAIN Assy, serial number, or accumulated power-on time is performed. When the MAIN Assy is replaced, input the serial number, using this menu.

Factory menu: Mainly used for factory presetting. The mode for line adjustment is displayed. Not for normal use. When the MAIN Assy is replaced, factory shipment setting (P69) is required. For details, see "Adjustment after the replacement of MAIN Assy" (6.2 ADJUSTMENT).

Panel Factory menu: Mainly used for servicing. Display of power-down data inside the module and of accumulated power-on time, MASK ON/OFF, and setting of the Vofs voltage can be performed. When either the MD DIGITAL Assy, Service panel, or power supply unit is replaced, setting is required, using this menu. For details, see "6.7 METHOD FOR REPLACING THE SERVICE PANEL ASSY", "7.1.5 BACKUP WHEN THE MAIN UNIT IS ADJUSTED".



Page 1: Factory settings, frame rate conversion setting, Subscreen orbiter setting, and PIP freeze setting
Page 2: Model name data, serial number setting/display, firmware version display, and accumulated power-on time display
Page 3: Slot data
Page 4: Data on shutdown by the main microcomputer
For details, see "Service Menu."

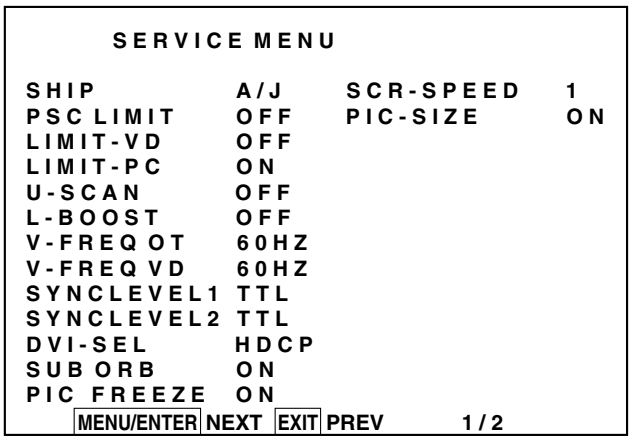
Page 8 : USAGE TIME menu (resetting USAGE TIME)
Page 9 : MONITOR INFORMATION menu (rewriting the serial number)
Page 10 : FUNCTION menu (factory settings)
For details, see "Adjustment specifications."
Others: To be used for factory presettings

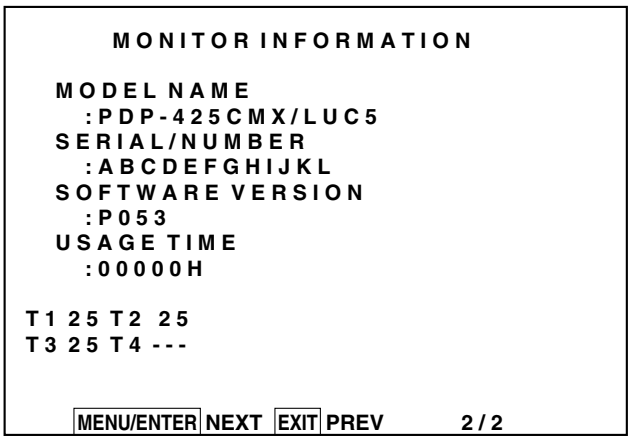
For details, see "Service menu for the module."

6.4 SERVICE MENU

Service menu

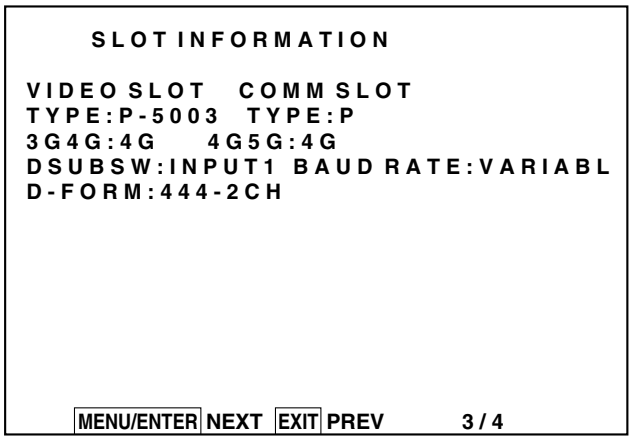
A screen shifts to the Service Menu mode by the next key operation.
Similarly, a screen ends the Service Menu mode by the next key operation.
MUTING + SET + CLEAR + MUTING
CLEAR : The key which moves to a next page group
ID SELECT : The key which moves to a previous page group

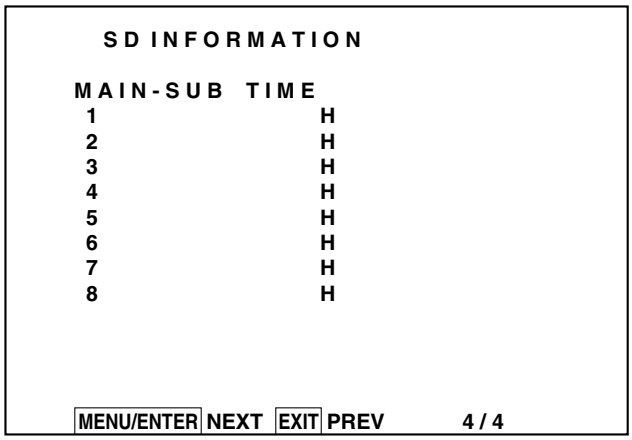




MENU	Functions	Item	default setting		
SHIP (shipment mode)	Selects the place of shipment	A/J /G /CKD	A/J	G	CKD
PSC-LIMIT(PLE output limit)	Unsupport.	OFF / 1- 255	OFF	OFF	OFF
LIMIT-VD(PLE output limit for video)	Unsupport.	ON/OFF	OFF	OFF	OFF
LIMIT-PC(PLE output limit for PC)	Unsupport.	ON/OFF	ON	ON	ON
U-SCAN(Under scan)	The change function in under-scan mode and over- scan mode.	ON/OFF	OFF	OFF	OFF
L-BOOST(Luminance boost)	Unsupport.	-	-	-	-
V-FREQ OT(Vertical freq. for other)	The AUTO/60Hz change function of Vertical freq. (for other)	AUTO/60HZ	60Hz	60Hz	60Hz
	60Hz mode ->convert to 75Hz				
V-FREQ VD(Vertical freq. for video)	The AUTO/60Hz change function of Vertical freq. (for video)	AUTO/60HZ	60Hz	60Hz	60Hz
	60Hz mode ->convert to 75Hz				
SYNCLEVEL 1	Unsupport.	-	-	-	-
SYNCLEVEL 2	Unsupport.	-	-	-	-
DVI-SEL	This setup is for the engineer	HDCP/ORG	HDCP	HDCP	HDCP
SUB ORB(Sub picture orbiter)	Set sub picture orbiter to off.	ON/OFF	ON	ON	ON
PIC FREEZE	Picture freeze setting.	ON/OFF	ON	ON	ON
SCR-SPEED(Screen wiper speed)	Unsupport.	1-5	1	1	1
PIC-SIZE(Picture size)	Unsupport.	ON/OFF	ON	ON	ON

MODEL NAME
A/J : PDP-425CMX/LUC5
G : PDP-42MXE10/LDFK5
CKD : PDP-42MXE10/YVXK5





VIDEO SLOT TYPE : P-5003 (P : made by Pioneer, PDA-5003)
P-5004 (P : made by Pioneer, PDA-5004)
P-CYBER (P : made by Pioneer, CYBER_SLOT)
S-A (S : made by 3rd party, TYPE-A)
S-B (S : made by 3rd party, TYPE-B)
S-C (S : made by 3rd party, TYPE-C)
:
:
S-J (S : made by 3rd party, TYPE-J)
---(No slot connection)
+++(Not defined)
3G4G : 3G (3rd Generation) ,4G (4th Generation)
DSUBSW : INPUT1 (LOOP OUT FROM INPUT1)
V-SLOT (LOOP OUT FROM VIDEOSLOT)
D-FORM : 422CBCRW (VIDEO correspondense double locking for 525i/625i)
422CRCBW (VIDEO correspondense double locking for 525i/625i)
422CBCRS (VIDEO correspondense single locking)
422CRCBS (VIDEO correspondense single locking)
444-1 CH (PC/ VIDEO correspondense)
444-2 CH (PC/ VIDEO correspondense)
+++ (Not defined)

COMM SLOT TYPE : P (made by Pioneer), S (made by 3rd party)
4G5G : 4G (4th Generation),5G (5th Generation)
BAUD RATE : VARIABLE (variable)
9600 F (9600bps fixed)
38400 F (38400bps fixed)

<MAIN, SUB Display Contents>

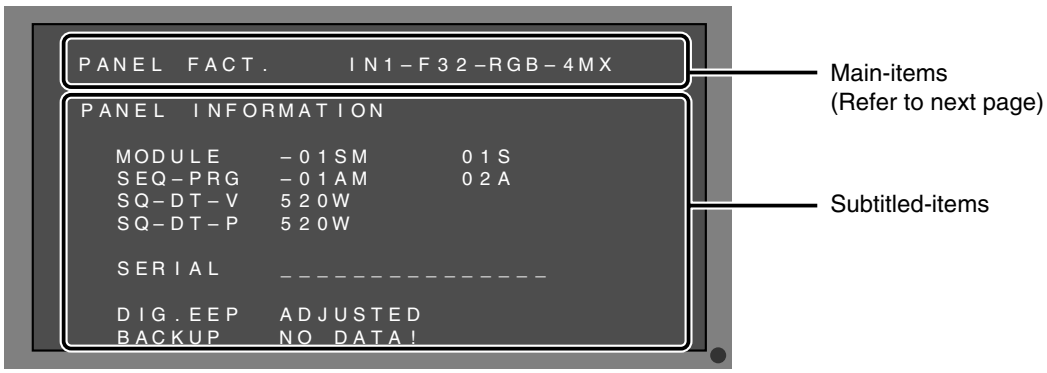
MAIN	SUB
0 : No SD (No abnormality)	0 : No sub category
5 : Speaker shortcircuitted	0 : No sub category
6 : Module u-com communication NG	0 : No sub category
8 : IIC communication NG	1 : EEPROM communication NG
	3 : VIDEO SLOT IC1 (CVBS) communication NG
	4 : VIDEO SLOT IC1 (Y/C) communication NG
	5 : A/D Main (A line) communication NG
	6 : A/D Main (B line) communication NG
	7 : IC6 communication NG
	F : VIDEO SLOT EEPROM communication NG
	J : AUDIO CONTROL IC communication NG
	K : Expand I/O2 communication NG
A : FAN stop	1 : FAN stop
B : Abnormal in temperature (high temperature)	1 : Thermal sensor 1 high temperature
	2 : Thermal sensor 2 high temperature
	3 : Thermal sensor 3 high temperature
	4 : Thermal sensor 4 high temperature
D : Abnormal in Power supply	0 : No sub category
8 : Other abnormality	1 : RLS cable pulled out
	2 : DC power down for COMM SLOT
	3 : DC power down for VIDEO SLOT
8 : NG except above item (main u-com NG)	0 : No sub category

6.5 FACTORY MODE

■ How to enter Factory Mode

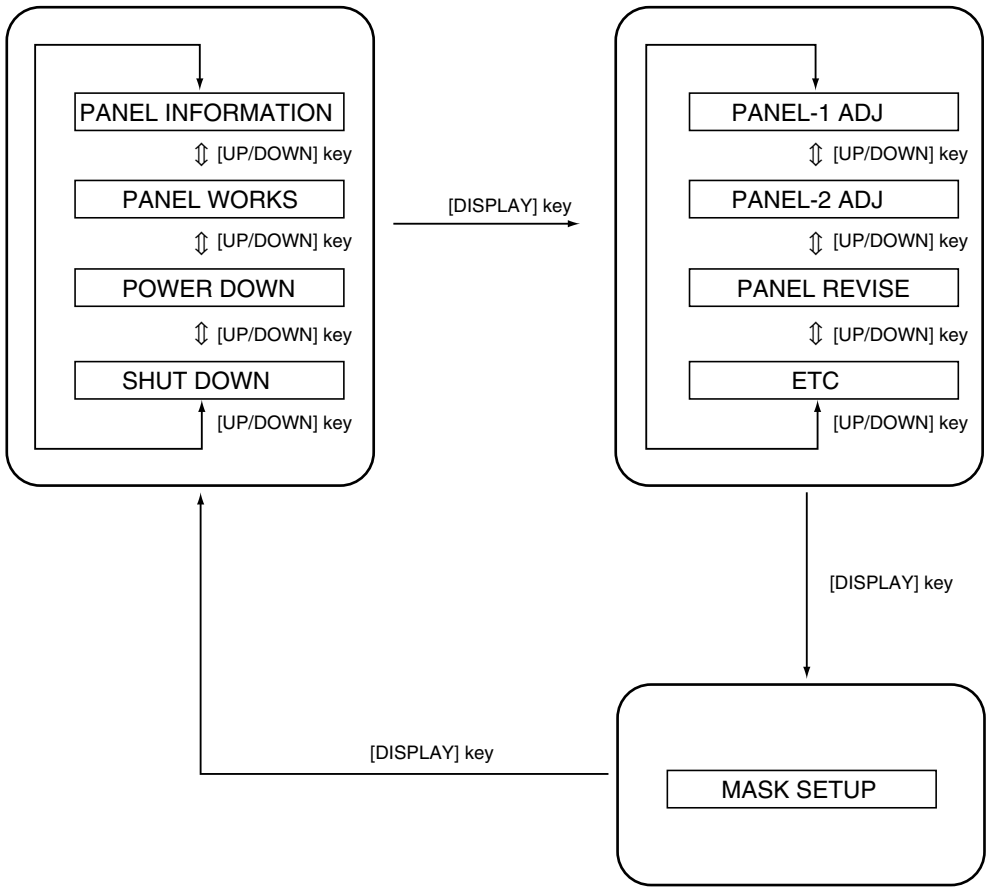
[Syandby state] ⇒ [DISPLAY] key ⇒ Not press key for 3 seconds ⇒ Press [LEFT], [UP], [LEFT], [RIGHT], [POWER] key sequentially.

■ Top screen of the Panel Factory



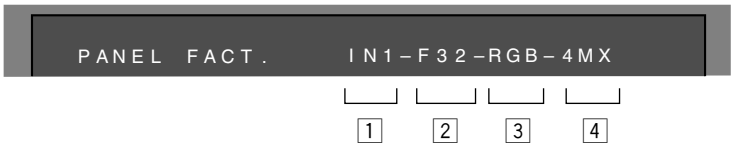
Note: With this model, the structure of Factory mode has been changed, and all items related to the Panel are gathered into PANEL FACTORY mode.

■ Factory Menu Construction



Main-item indications

Four parameters are displayed:



1 Input function

Input Functions (response)	MAIN INPUT
"IN 1"	INPUT1
"IN 2"	INPUT2
"IN 3"	INPUT3
"IN 4"	INPUT4
"IN 5"	INPUT5
"***"	Unspecified (at standby)

4 Option

Institutional use system (6th generation) display : 4MX

2 SIG mode and screen size

Note: See SIG-Mode Tables. (See next page.)

3 Color system

Color System (response)	Signal Type	Color System	Color System (response)	Signal Type	Color System
"NTV"	CVBS	NTSC	"4NS"	Y/C	4.43NTSC
"PLV"		PAL	"PMS"		PAL M
"SCV"		SECAM	"PNS"		PAL N
"4NV"		4.43NTSC	"BWS"		Unable to discriminate/No signal
"PMV"		PAL M	"CBR"	COMPONENT	Y/Cb/Cr
"PNV"		PAL N	"PBR"		Y/Pb/Pr
"BWV"		Unable to discriminate/No signal	"RGB"		RGB
"NTS"	Y/C	NTSC		PC ANALOG	
"PLS"		PAL	"DIG"	DIGITAL VIDEO	
"SCS"		SECAM		PC DVI	

● SIG-Mode Table

The signal mode is displayed in three charecters:

1st character : Resolutin of the input signal (numerics for the video signals, and alphabetics for the PC signals)
2nd character : Grouping of the Vertical frequencies
3rd character : Main screen size

(1st character)

Input Signal Type

PC Signal Input		Video Signal Input	
Input Signal Type (response)	**Signal Type (state)**	**Input Signal Type (response)**	**Signal Type (state)**
"–"	NO SIGNAL	"–"	NO SIGMAL
"?"	OUT OF RANGE	"?"	OUT OF RANGE
"A"	640 × 400/720 × 400	"1"	SDTV / 525i (480i)
"B"	640 × 480	"2"	SDTV / 525p (480p)
"C"	848 × 480/852 × 480	"3"	SDTV / 625i (576i)
"D"	800 × 600	"4"	SDTV / 625p (576p)
"E"	832 × 624	"5"	HDTV / 750p (720p)
"F"	1024 × 768	"6"	HDTV / 1125i (1035i)
"G"	1280 × 768	"7"	HDTV / 1125i (1080i)
"H"	1152 × 864	"8"	HDTV / 1125p(1080p)
"I"	1152 × 870		
"J"	1152 × 900		
"K"	1280 × 960		
"L"	1280 × 1024		
"M"	1400 × 1050		
"N"	1600 × 1200		

(2nd character)

Vertical Frequency (grouping by frequency)

V Frequency group (response)	Vertical Frequency(Hz)
"–"	NO SIGNAL
"?–"	OUT OF RANGE
"B"	20.0 to 28.0
"C"	28.0 to 45.0
"1"	45.0 to 54.5
"2"	54.5 to 58.2
"3"	58.2 to 63.0
"4"	63.0 to 68.0
"5"	68.0 to 73.4
"6"	73.4 to 73.9
"7"	73.9 to 80.0
"8"	80.0 to 88.5

(3rd character)

Main Screen Size

Main screen size (response)	Screen size
"0"	DOT BY DOT
"1"	4 : 3
"2"	FULL / FULL 1080i
"3"	ZOOM
"5"	WIDE
"6"	14 : 9
"9"	UNDERSCAN
"A"	2.35 : 1

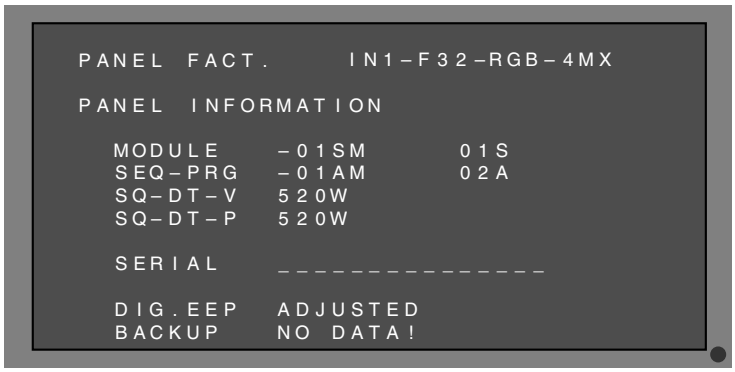
■ Configuration of Panel Factory mode

No.	Submode Name / Submode Items	Adjustable Range	Remarks
1	PANEL INFORMATION		
2	PANEL WORKS		
3	POWER DOWN		
4	SHUT DOWN		
5	PANEL-1 ADJ (+)		
5-1	X-SUS B <=>	120 to 136	Equivalent to XSB
5-2	Y-SUS B <=>	120 to 136	Equivalent to YSB
5-3	Y-SUSTAIL T <=>	120 to 136	Equivalent to YTG
5-4	Y-SUSTAIL W <=>	120 to 136	Equivalent to YTW
5-5	XY-RST W <=>	120 to 136	Equivalent to RSW
5-6	SUS FREQ. <=>	MODE1 to MODE8	Equivalent to SFR
6	PANEL-2 ADJ (+)		
6-1	R-HIGH <=>	000 to 511	Equivalent to PRH
6-2	G-HIGH <=>	000 to 511	Equivalent to PGH
6-3	B-HIGH <=>	000 to 511	Equivalent to PBH
6-4	R-LOW <=>	000 to 999	Equivalent to PRL
6-5	G-LOW <=>	000 to 999	Equivalent to PGL
6-6	B-LOW <=>	000 to 999	Equivalent to PBL
6-7	ABL <=>	000 to 255	Equivalent to ABL
7	PANEL REVISE		
7-1	R-LEVEL <=>	LV-0 to LV-7	Equivalent to RRL
7-2	G-LEVEL <=>	LV-0 to LV-7	Equivalent to RGL
7-3	B-LEVEL <=>	LV-0 to LV-7	Equivalent to RBL
8	ETC (+)		
8-1	BACKUP DATA <=>	NO OPRT<=>TRANSFER or ERR	Equivalent to BCP
8-2	DIGITAL EEPROM <=>	NO OPRT<=>DELETE/REPAIR	Equivalent to FAJ/UAJ
8-3	PD INFO. <=>	NO <=>CLEAR	Equivalent to CPD
8-4	SD INFO. <=>	NO <=>CLEAR	Equivalent to CSD
8-5	HR-MTR INFO. <=>	NO <=>CLEAR	Equivalent to CHM
8-6	PM/B1-B5 <=>	NO <=>CLEAR	Equivalent to CPM
8-7	P-COUNT INFO. <=>	NO <=>CLEAR	Equivalent to CPC
9	MASK SETUP (+)		
9-1	MASK OFF		
9-2	SGL MASK 01	<=>48V<=>50V<=>60V<=>60P<=>70P<=>72V<=>75V<=> (Select each sequence.)	
9-3	• • •		• • •
9-4	SGL MASK 30		
9-5	SGL MASK 51		
9-6	• • •		• • •
9-7	SGL MASK 74		
9-8	CMB MASK 01		
9-9	• • •		• • •
9-10	CMB MASK 09		

■ Details on submodes related to the panel

The GUI display examples here are those displayed when the main unit is used with the 50-inch model.

1. PANEL INFORMATION

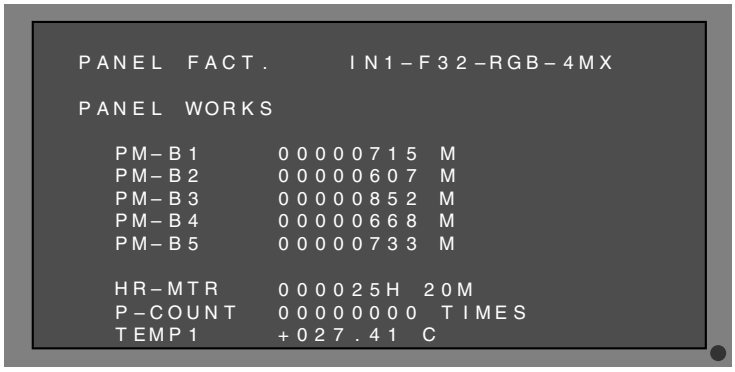


■ Key operation

<DOWN>	: Shifting to PANEL WORKS
<UP>	: Shifting to SHUT DOWN
<DISPLAY>	: Shifting to PANEL-1 ADJ
<L/R>	: Updating displayed information

The version of the microcomputer of the panel, serial number of the main unit, adjustment values of the main unit, and backup status are displayed.

2. PANEL WORKS

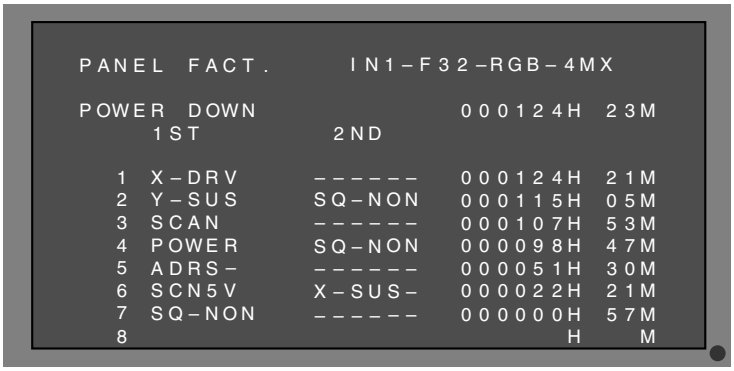


■ Key operation

<DOWN>	: Shifting to POWER DOWN
<UP>	: Shifting to PANEL INFORMATION
<DISPLAY>	: Shifting to PANEL-1 ADJ
<L/R>	: Updating displayed information

- The data from the pulse meter for each block from PM-B1 to PM-B5 are indicated. The values stored in the EEPROM (3 bytes each) are each converted into a decimal number, and the higher-order 8 digits are displayed (that means that the lowest-order digit represents millions).
- TEMP1: Indicates the temperature of the panel. By your pressing the L or R key, the temperature value can be updated.

3. POWER DOWN


PANEL FACT. IN1-F32-RGB-4MX
POWER DOWN 000124H 23M
1ST 2ND
1 X-DRV ------ 000124H 21M
2 Y-SUS SQ-NON 000115H 05M
3 SCAN ------ 000107H 53M
4 POWER SQ-NON 000098H 47M
5 ADRS- ------ 000051H 30M
6 SCN5V X-SUS- 000022H 21M
7 SQ-NON ------ 000000H 57M
8 H M

■ Key operation

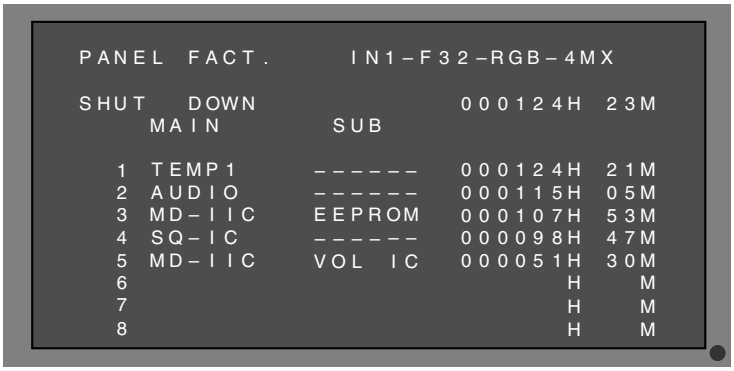
<DOWN> : Shifting to SHUTDOWN
<UP> : Shifting to PANEL WORKS
<DISPLAY> : Shifting to PANEL-1 ADJ
<L/R> : Updating displayed information

- Basically, data acquired with the command QPD are displayed in the columns "1ST" and "2ND, with the values from the hour meter when the power-down occurred.

<Causes of power-down and corresponding OSD indications>

Cause of power-down	OSD Indication	Cause of power-down	OSD Indication
POWER SUPPLY Unit	P-PWR	ADDRESS Assy	ADRS
SCAN Assy	SCAN	X-DRIVE Assy	X-DRV
5V power for SCAN	SCN5V	DCDC for X drive	X-DCDC
Y-DRIVE ASSY	Y-DRV	X-SUS	X-SUS
DCDC for Y drive	Y-DCDC	Sequence drive stopped	SQ-NON
Y-SUS	Y-SUS	Specification inability	UNKNOW

4. SHUT DOWN


PANEL FACT. IN1-F32-RGB-4MX
SHUT DOWN 000124H 23M
MAIN SUB
1 TEMP1 ------ 000124H 21M
2 AUDIO ------ 000115H 05M
3 MD-IIC EEPROM 000107H 53M
4 SQ-IC ------ 000098H 47M
5 MD-IIC VOL IC 000051H 30M
6 H M
7 H M
8 H M

■ Key operation

<DOWN> : Shifting to PANEL INFORMATION
<UP> : Shifting to POWER DOWN
<DISPALY> : Shifting to PANEL-1 ADJ
<L/R> : Updating displayed information

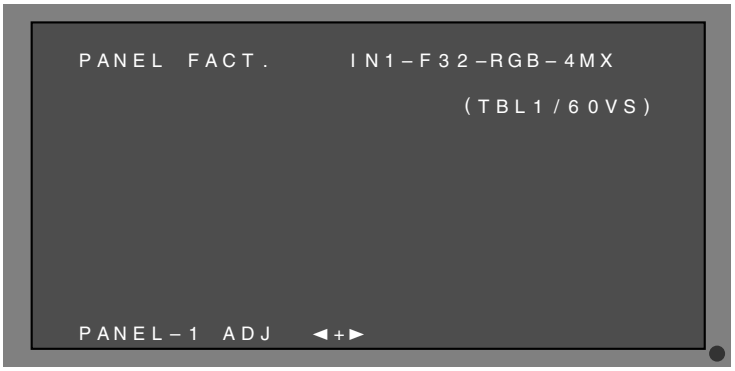
- Basically, data acquired with the command QSD (for MDU-IIC, subcategory data are also displayed) are displayed with the values from the hour meter when the shutdown occurred.

<Causes of shutdown and corresponding OSD indications>

Cause of shutdown (main)	OSD Indication
SEQUENCE PROCESSOR	SQ_IC
MDU-IIC	MD-IIC (with subcategory)
Abnormality in RST2	RST2
Panel having high temperature	TEMP1

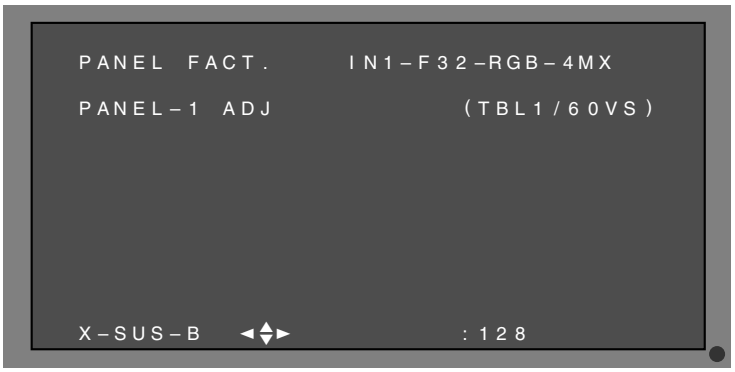
Cause of shutdown (sub)	OSD Indication
EEPROM	EEPROM (IC3156)
BACKUP	BACKUP (IC3754)
DAC	DAC (IC3302 to IC3304)

5. PANEL-1 ADJ



■ Key operation

<DOWN> : Shifting to PANEL-2 ADJ
<UP> : Shifting to POWER DOWN
<SET> : Shifting to the next nested layer
<DISPLAY> : Shifting to MASK SETUP



■ Key operation

<DOWN> : Shifting to the next item
<UP> : Shifting to the previous item
<RIGHT> : Adding by one to the adjustment value
<LEFT> : Subtracting by one from the adjustment value
<VOL+> : Adding by 10 to the adjustment value
<VOL-> : Subtracting by 10 from the adjustment value
<SET> : Determining the adjustment value and shifting to the upper layer
<DISPALY> : Shifting to MASK SETUP

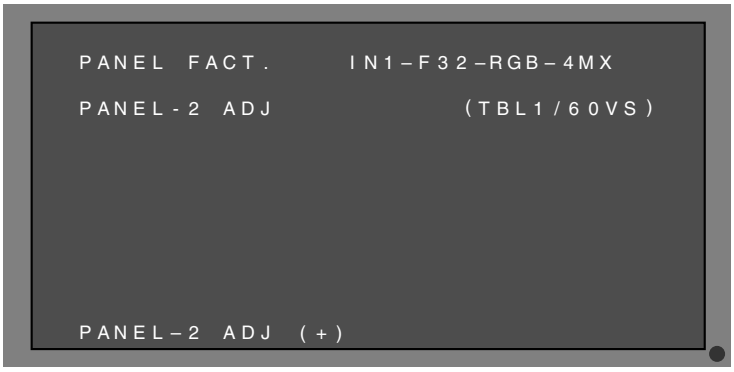
<Drive-sequence indications and indications for the ABL/WB tables>
(The OSD indications are displayed at the right part of the third line for submode PANEL-1 ADJ and subsequent submodes.)

Type of WB/ABL Tables		Type of Drive Sequences					
		Standard Video/MASK ON		Nonstandard Video		PC	
TBL1		48VS		---		60PS	Not used for consumer products
TBL2		50VS		50VN		70PS	
TBL3		60VS		60VN			
TBL4		72VS	Only Mask indication	---			
		75VS		75VN			

<Lower-layer items of PANEL-1 ADJ>

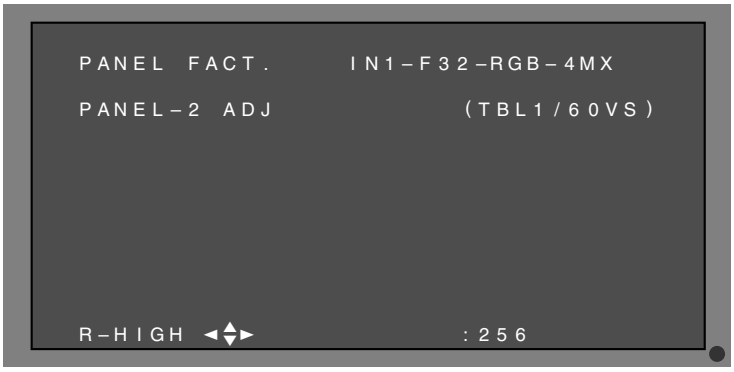
No.	Items	Adjustment/Setting Value	Remarks
1	X-SUS B <=>	120 to 136	Equivalent to XSB
2	Y-SUS B <=>	120 to 136	Equivalent to YSB
3	Y-SUSTAIL T <=>	120 to 136	Equivalent to YTG
4	Y-SUSTAIL W <=>	120 to 136	Equivalent to YTW
5	XY-RST W <=>	120 to 136	Equivalent to RSW
6	SUS FREQ. <=>	<=>MODE1 to MODE8<=>	Equivalent to SFR

6. PANEL-2 ADJ



■ Key operation

<DOWN> : Shifting to PANEL REVISE
<UP> : Shifting to PANEL-1 ADJ
<DISPALY> : Shifting to MASK SETUP
<SET> : Shifting to the next nested layer



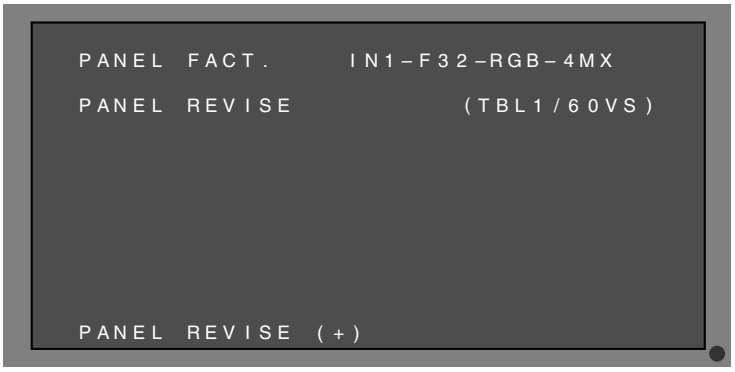
■ Key operation

<DOWN> : Shifting to the next item
<UP> : Shifting to the previous item
<RIGHT> : Adding by one to the adjustment value
<LEFT> : Subtracting by one from the adjustment value
<VOL+> : Adding by 10 to the adjustment value
<VOL-> : Subtracting by 10 from the adjustment value
<SET> : Determining the adjustment value and shifting to the upper layer
<DISPALY> : Shifting to MASK SETUP

<Lower-layer items of PANEL-2 ADJ>

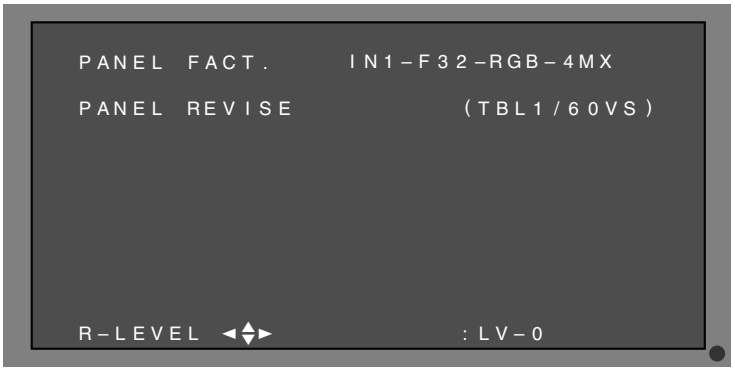
No.	Items	Adjustment/Setting Value	Remarks
1	R-HIGH <=>	000 to 511	Equivalent to PRH
2	G-HIGH <=>	000 to 511	Equivalent to PGH
3	B-HIGH <=>	000 to 511	Equivalent to PBH
4	R-LOW <=>	000 to 999	Equivalent to PRL
5	G-LOW <=>	000 to 999	Equivalent to PGL
6	B-LOW <=>	000 to 999	Equivalent to PBL
7	ABL <=>	000 to 255	Equivalent to ABL

7. PANEL REVISE



■ Key operation

<DOWN> : Shifting to ETC
<UP> : Shifting to PANEL-2 ADJ
<DISPLAY> : Shifting to MASK SETUP
<SET> : Shifting to the next nested layer



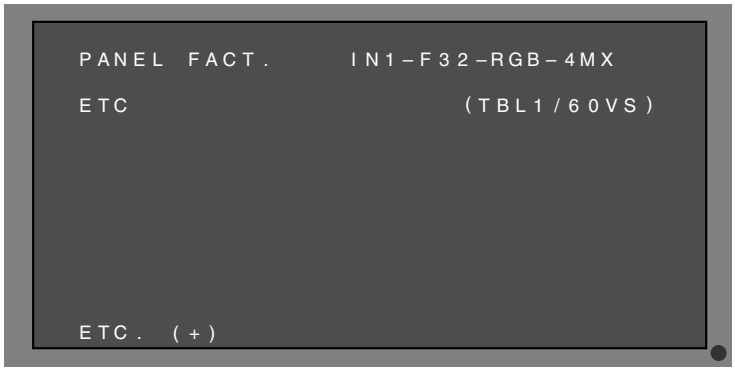
■ Key operation

<DOWN> : Shifting to the next item
<UP> : Shifting to the previous item
<RIGHT> : Adding by one to the adjustment value
<LEFT> : Subtracting by one from the adjustment value
<SET> : Determining the setting value and shifting to the upper layer
<DISPLAY> : Shifting to MASK SETUP

<Lower-layer items of PANEL REVISE>

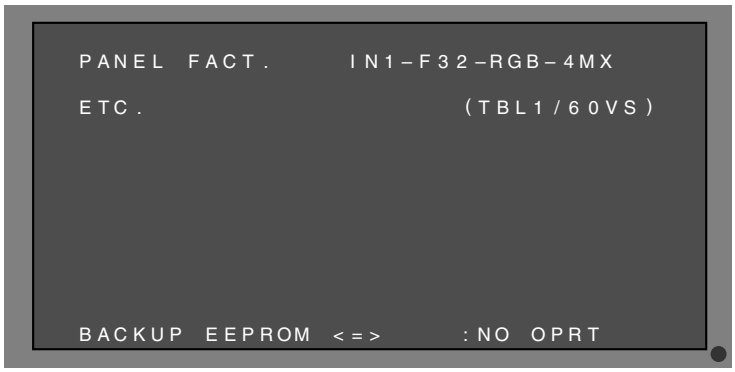
No.	Items	Adjustment/Setting Value	Remarks
1	R-LEVEL <=>	<=>LV-0 to LV-7<=>	Equivalent to RRL
2	G-LEVEL <=>	<=>LV-0 to LV-7<=>	Equivalent to RGL
3	B-LEVEL <=>	<=>LV-0 to LV-7<=>	Equivalent to RBL

8. ETC.



■ **Key operation**

<DOWN> : Shifting to MASK SETUP
<UP> : Shifting to PANEL REVISE
<DISPLAY> : Shifting to MASK SETUP
<SET> : Shifting to the next nested layer



■ **Key operation**

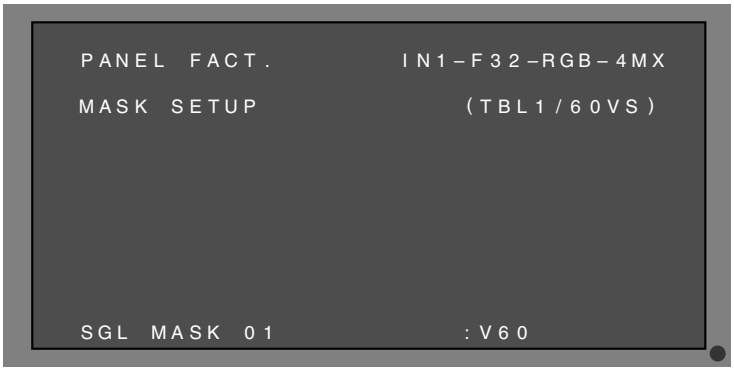
<DOWN> : Shifting to the next item
<UP> : Shifting to the previous item
<RIGHT> : Adding by one to the adjustment value
<LEFT> : Subtracting by one from the adjustment value
<SET> : Determining the setting value and shifting to the upper layer
<DISPLAY> : Shifting to MASK SETUP

<Lower-layer items of ETC.>

No.	Items	Adjustment/Setting Value	Remarks
1	BACKUP DATA <=>	<=>NO OPRT<=>TRANSFER<=>	"ERR" is indicated when no data are in the backup EEPROM. To activate the option to select TRANSFER, press the SET key about 5 seconds. (There is a situation resting more than 5 seconds.)
2	DIGITAL EEPROM <=>	<=>NO OPRT<=>REPAIR/DELETE<=>	"DELETE" is indicated when the main unit has been already adjusted. To activate the option to select REPAIR/DELETE, press the SET key about 5 seconds. (There is a situation resting more than 5 seconds.)
3	PD INFO. <=>	<=>NO <=>CLEAR<=>	To activate the option to select CLEAR, repeatedly press the SET key about 5 seconds. (There is a situation resting more than 5 seconds.)
4	SD INFO. <=>	<=>NO <=>CLEAR<=>	
5	HR-MTR INFO. <=>	<=>NO <=>CLEAR<=>	
6	PM/B1-B5 <=>	<=>NO <=>CLEAR<=>	
7	P COUNT INFO. <=>	<=>NO <=>CLEAR<=>	

- "NO OPRT" is selected when this submode is entered (to avoid accidental misoperation).
- When each item is set, the process starts then the unit shifts to the upper layer. (When NO OPRT is determined, the unit will shift to the upper layer without doing anything.)
- When data are set to be backed up, if the digital EEPROM has not been adjusted, do the operation of LED pattern No. 7.

9. MASK SETUP



■ Key operation

<DOWN> : Shifting to the next MASK
<UP> : Shifting to the previous MASK
<RIGHT> : Changing MASK sequence (+)
<LEFT> : Changing MASK sequence (-)
<DISPALY> : Shifting to PANEL INFORMATION

<Lower-layer items of MASK SETUP>

No.	Items	Adjustment/Setting Value	Remarks
1	MASK OFF		
2	SGL MASK 01	<=>48V<=>50V<=>60V<=> 60P<=>70P<=>72V<=>75V<=>	
3	• • •		• • •
4	SGL MASK 30		
5	SGL MASK 51		
6	• • •		• • •
7	SGL MASK 74		
8	CMB MASK 01		
9	• • •		• • •
10	CMB MASK 09		

• With the keys <LEFT> and <RIGHT>, the Panel drive sequence in the MASK indication is changed in the following way:
<=>48V<=>50V<=>60V<=>72V<=>75V<=>60P<=>70P<=>

6.6 RS-232C C0MMAND

■ QUEST Command List

Command	Functional Description	Command Effectiveness	
		Factory	Normal Operation
QAP	To acquire data on the model name	O	O
QST	To acquire data on the product status	O	O
QS1	To acquire data on the various version information	O	O
QS4	To acquire data on the factory information	O	O
QPI	To acquire data on the integrator/PICTURE information	O	O
QWB	To acquire data on the integrator/WHITE BALANCE information	O	O
QPS	To acquire data on the integrator/SCREEN information	O	O
QSS	To acquire data on the setup information	O	O
QSO	To acquire data on the menu integrator/OPTION information	O	O
QCI	To acquire data on the time information	O	O
QSU	To acquire data on the audio status	O	O
QSI	To acquire data on the information of panel input video signal	O	O
QS2	To acquire data on the panel operation information	O	O
QIP	To acquire data on the other panel information	O	O
QAJ	To acquire data on the panel adjustment value	O	O
QPW	To acquire data on the adjustment value of panel ABL/WB	O	O
QPC	To acquire data on the POWER ON COUNTER value	O	O
QPM	To acquire data on the PLUSE METER	O	O
QNP	To acquire data on the panel's serial number	O	O
QPD	To acquire data on the POWER DOWN information	O	O
QNG	To acquire data on the SHUT DOWN information of the main	O	O
QSD	To acquire data on the SHUT DOWN information of the panel	O	O
QAMS00	To acquire data on the A-LPF of W/B auto adjustment data of MAIN Assy	O	–
QAMS01	To acquire data on the A-STD of W/B auto adjustment data of MAIN Assy	O	–
QAMS02	To acquire data on the B-LPF of W/B auto adjustment data of MAIN Assy	O	–
QAMS03	To acquire data on the B-STD of W/B auto adjustment data of MAIN Assy	O	–
QAMS04	To acquire data on the A-LPF auto adjustment data of MAIN Assy	O	–
QAMS05	To acquire data on the B-LPF auto adjustment data of MAIN Assy	O	–

[QAP] To acquire data on the model name

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QAP (fixed)
3	Model name information	18Byte	A/J (North America / Japan model): PDP-425CMX/LUC5***
			G (European general model): PDP-42MXE10/LDFK5*
			CKD (European CKD model): PDP-42MXE10/YVXK5*
4	Check sum	2Byte	
5	ETX	1Byte	03hex

[QST] To acquire data on the product status

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QST (fixed)
3	Generation information	1Byte	5 (fixed)
4	Inch information	1Byte	4 (fixed)
5	Destination	1Byte	M (fixed)
6	Power supply state	1Byte	S: Standby state P: Energization state
7	At standby: standby factor	1Byte	N: at normal standby W: at wait by POWER MANAGEMENT S: at standby with SD or PD
	In electric conduction: Main-screen signal state		N: at normal signal input L: at no signal input O: at OUT OF RANGE signal input
8	During standby or full-screen display: Dummy data	1Byte	
	During two-screen display: Sub-screen signal state		N: at normal signal input L: at signal no input O: at OUT OF RANGE signal input
9	Main input function information	3Byte	IN1: INPUT1 IN2: INPUT2 IN3: INPUT3 IN4: INPUT4 IN5: INPUT5
10	Sub input function information	3Byte	IN1: INPUT1 IN2: INPUT2 IN3: INPUT3 IN4: INPUT4 IN5: INPUT5 Note 1
11	Main screen size infromation	1Byte	0: DOT BY DOT 1: 4:3 2: FULL 3: ZOOM 5: WIDE 6: 14:9 9: UNDERSCAN A: 2.35:1
12	Two-screen display state	1Byte	0: OFF(full-screen) 1: SIDE BY SIDE 1 2: PinP(lower right) 3: PinP(upper right) 4: PinP(upper left) 5: PinP(lower left) 6: SIDE BY SIDE 2-L 9: SIDE BY SIDE 2-R A: SIDE BY SIDE 3 B: SIDE BY SIDE 4-L C: SIDE BY SIDE 4-R
13	Functional lock information	1Byte	0: LOCK OFF 1: BUTTONS LOCK 2: IR LOCK 3: IR&BUTTONS LOCK 4: MEMORY LOCK
14	Temperature information 1 (inside)	3Byte	Main unit inside temperature (centigrade) Note 2
15	Temperature information 2 (SLOT)	3Byte	SLOT temperature (centigrade) Note 2
16	Temperature information 3 (outside air)	3Byte	Outside air temperature (centigrade) Note 2
17	Serial number	15Byte	15 columns of character string
18	Dummy data	3Byte	
19	Dummy data	2Byte	
20	HOUR METER	5Byte	5 columns of character string
21	Check sum	2Byte	
22	ETX	1Byte	03hex

Note 1 : During standby or full-screen display, values stored in memory of the unit are output.
Note 2 : During standby or immediately after the power is turned on, accurate temperature data cannot be obtained.
To obtain an accurate temperature reading, wait for a few minutes after the power is turned on.
These information is output as reference information (these are not guaranteed value).
Please refer to temperature information 3 normally.

[QS1]: To acquire data on the various version information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QS1 (fixed)
3	Panel resolution / size information	1Byte	3 (fixed)
4	Panel generation information	1Byte	6 (fixed)
5	Panel destination information	1Byte	∗ (fixed)
6	Panel grade	1Byte	∗ (fixed)
7	Panel product form	1Byte	D (fixed)
8	Boot version of module microcomputer	3Byte	
9	Program version of module microcomputer	8Byte	
10	Boot version of Astra	3Byte	
11	Program version of Astra	8Byte	
12	Sequence version (42/43VIDEO)	4Byte	
13	Sequence version (42/43PC)	4Byte	
14	Sequence version (50/61VIDEO)	4Byte	
15	Sequence version (50/61PC)	4Byte	
16	Simplicity / multi-function operation mode information	1Byte	L (fixed)
17	Delimiter	1Byte	, (comma)(fixed)
18	Dummy	4Byte	
19	Program version of main microcomputer	8Byte	
20	Dummy	40Byte	
21	Check sum	2Byte	
22	ETX	1Byte	03hex

[QS4]: To acquire data on the factory information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QS4 (fixed)
3	Main input function	3Byte	As the same contents as item 9 of QST command
4	Input signal classification	1Byte	Refer to the following table
5	Vertical frequency information	1Byte	Refer to the following table
6	Main-screen size information	1Byte	As the same contents as item 11 of QST command
7	Color system information	3Byte	Refer to the following table
8	Destination information	3Byte	CMX (fixed)
9	Check sum	2Byte	
10	ETX	1Byte	03hex

Input signal classification

At PC signal input		At VIDEO signal input	
Input signal classification	**Input Signal**	**Input signal classification**	**Input Signal**
–	No signal input	–	No signal input
?	OUT OF RANGE	?	OUT OF RANGE
A	640 x 400 / 720 x 400	1	SDTV / 525i (480i)
B	640 x 480	2	SDTV / 525p (480p)
C	848 x 480 / 852 x 480	3	SDTV / 625i (576i)
D	800 x 600	4	SDTV / 625p (576p)
E	832 x 624	5	HDTV / 750p (720p)
F	1024 x 768	6	HDTV / 1125i (1035i)
G	1280 x 768	7	HDTV / 1125i (1080i)
H	1152 x 864	8	HDTV / 1125p (1080p)
I	1152 x 870		
J	1152 x 900		
K	1280 x 960		
L	1280 x 1024		
M	1400 x 1050		
N	1600 x 1200		

Vertical frequency Information (grouping with frequency)

Vertical Frequency Information	Vertical Frequency (Hz)
–	No signal input
?	OUT OF RANGE
B	20.0 - 28.0
C	28.0 - 45.0
1	45.0 - 54.5
2	54.5 - 58.2
3	58.2 - 63.0
4	63.0 - 68.0
5	68.0 - 73.4
6	73.4 - 73.9
7	73.9 - 80.0
8	80.0 - 88.5

Color System Information

Color System Information	Signal Type	Color System
NTV	CVBS	NTSC
PLV		PAL
SCV		SECAM
4NV		4.43NTSC
PMV		PAL M
PNV		PAL N
BWV		Distinction inability/no signal input
NTS	Y/C	NTSC
PLS		PAL
SCS		SECAMPAL
4NS		4.43NTSC
PMS		PAL M
PNS		PAL N
BWS		Distinction inability/no signal input
CBR	COMPONENT	Y/Cb/Cr
PBR		Y/Pb/Pr
RGB		RGB
	PC ANALOG	
DIG	DIGITAL VIDEO	
	PC DVI	

[QPI]: To acquire data on the integrator/PICTURE information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPI (fixed)
3	CONTRAST	3Byte	000 - 255 Note 1
4	BRIGHTNESS	3Byte	000 - 255 Note 1
5	C,DETAIL R (RED)	3Byte	000 - 060 Note 1
6	C,DETAIL Y (YELLOW)	3Byte	000 - 060 Note 1
7	C,DETAIL G (GREEN)	3Byte	000 - 060 Note 1
8	C,DETAIL C (CYAN)	3Byte	000 - 060 Note 1
9	C,DETAIL B (BLUE)	3Byte	000 - 060 Note 1
10	C,DETAIL M (MAGENTA)	3Byte	000 - 060 Note 1
11	H.ENHANCE	3Byte	000 - 015 Note 1, 2
12	V.ENHANCE	3Byte	000 - 015 Note 1, 2
13	COLOR	3Byte	000 - 127 Note 1, 3
14	TINT	3Byte	000 - 060 Note 1, 3
15	SHARPNESS	3Byte	000 - 015 Note 1, 3
16	Main input function	3Byte	As the same contents as item 9 of QST command
17	Man screen size information	1Byte	As the same contents as item 11 of QST command
21	Check sum	2Byte	
22	ETX	1Byte	03hex

Note 1 : When the type of signal is not settled, dummy data are output.
Note 2 : Dummy data are output at video signal input.
Note 3 : Dummy data are output at PC signal input.

[QWB]: To acquire data on the integrator/WHITE BALANCE information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QWB (fixed)
3	R.HIGH	3Byte	000 - 255 Note 1
4	G.HIGH	3Byte	000 - 255 Note 1
5	B.HIGH	3Byte	000 - 255 Note 1
6	R.LOW	3Byte	000 - 255 Note 1
7	G.LOW	3Byte	000 - 255 Note 1
8	B.LOW	3Byte	000 - 255 Note 1
9	Main input function	3Byte	As the same contents as item 9 of QST command
10	Man screen size information	1Byte	As the same contents as item 11 of QST command
11	Check sum	2Byte	
12	ETX	1Byte	03hex

Note 1 : When the type of signal is not settled, dummy data are output.

[QPS]: To acquire data on the integrator/SCREEN information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPS (fixed)
3	H.POSITION	3Byte	000 - 255 Note 1
4	V.POSITION	3Byte	000 - 255 Note 1
5	H.SIZE	3Byte	000 - 064 Note 1
6	V.SIZE	3Byte	000 - 064 Note 1
7	CLOCK	3Byte	000 - 255 Note 1, 2
8	PHASE	3Byte	000 - 031 Note 1, 2
9	Main input function	3Byte	As the same contents as item 9 of QST command
10	Man screen size information	1Byte	As the same contents as item 11 of QST command
21	Check sum	2Byte	
22	ETX	1Byte	03hex

Note 1 : When the type of signal is not settled, dummy data are output.
Note 2 : Dummy data are output at DVI or video signal input.

[QSS]: To acquire data on the setup information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QSS (fixed)
3	COLOR TEMP.	1Byte	1: LOW 2: MID LOW 3: MIDDLE 4: MID HIGH 5: HIGH Note 1
4	POWER MGT.	1Byte	0: OFF 1: ON
5	AUTO POWER OFF	1Byte	0: DISABLE 1: ENABLE
6	DNR	1Byte	0: OFF 1: LOW 2: MIDDLE 3: HIGH Note 1
7	MPEG NR	1Byte	0: OFF 1: LOW 2: MIDDLE 3: HIGH Note 1
8	CTI	1Byte	0: OFF 1: ON Note 1
9	PURECINEMA	1Byte	0: OFF 1: ON Note 1
10	COLOR DECODING	1Byte	1: RGB 2: COMP1 3: COMP2 Note 1
11	COLOR SYSTEM	1Byte	1: AUTO 2: NTSC 3: PAL 4: SECAM 5: 4.43NTSC 6: PAL M 7: PAL N Note 1
12	DVI SET UP (PLUG/PLAY)	1Byte	1: PC 2: VIDEO Note 1
13	DVI SET UP (BLACK LEVEL)	1Byte	1: LOW 2: HIGH Note 1
14	BRT.ENHANCE	1Byte	0: OFF 1: ON Note 1
15	SUB VOLUME	2Byte	00 - 20
16	Main input function	3Byte	As the same contents as item 9 of QST command
17	Man screen size information	1Byte	As the same contents as item 11 of QST command
18	Check sum	2Byte	
19	ETX	1Byte	03hex

Note 1 : In case of setting value data that the output is impossible by type of input signal, dummy data are output.

[QSO]: To acquire data on the menu integrator/OPTION information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QSO (fixed)
3	ENERGY SAVE	1Byte	1: STANDARD 2: MODE1 3: MODE2 4: MODE3 5: AUTO
4	Program timer	1Byte	0: OFF 1: ON
5	SCREEN MANAGEMENT (ORBITER)	1Byte	0: OFF 1: MODE1 2: MODE2 3: MODE3
6	SCREEN MANAGEMENT (SOFT FOCUS)	1Byte	0: OFF 1: 1 2: 2 3: 3 4: 4
7	AUTO SETUP MODE	1Byte	0: INACTIVE 1: ACTIVE
8	AUTO FUNCTION	1Byte	0: OFF 1: INPUT1 2: INPUT4
9	PIP DETECT	1Byte	0: INACTIVE 1: ACTIVE
10	SPLIT FREEZE	1Byte	0: OFF 1: SIDE BY SIDE 2: PIP
11	SCREEN MASK	1Byte	0: OFF 2: INVERSE 3: WHITE 4: RED 5: GREEN 6: BLUE 7: YELLOW
12	SIDE MASK R-LEVEL	3Byte	000 - 255
13	SIDE MASK G-LEVEL	3Byte	000 - 255
14	SIDE MASK B-LEVEL	3Byte	000 - 255
15	VIDEO WALL (MODE)	1Byte	0: OFF 1: 1-screen 2: 4-screen 3: 9-screen 4: 16-screen 5: 25-screen
16	VIDEO WALL (POSITION)	2Byte	01 - 56
17	VIDEO WALL (TYPE)	1Byte	0: NORMAL 1: ADJUSTED
18	VIDEO WALL (POWER ON DELAY)	1Byte	0: OFF 1: ON 2: MODE1 3: MODE2
19	VIDEO WALL (PLE LINK)	1Byte	0: OFF 1: ON
20	VIDEO WALL (REPEAT TIMER)	1Byte	0: OFF 1: ON
21	FAN CONTROL	1Byte	1: AUTO 2: MAX
22	OSD	1Byte	0: OFF 1: ON
23	OSD SIZE	1Byte	0: LARGE 1: SMALL
24	OSD ANGLE	1Byte	0: H 1: V
25	FRONT INDICATOR	1Byte	0: OFF 1: ON
26	COLOR MODE	1Byte	1: NORMAL 2: STUDIO
27	PRO USE UNDERSCAN	1Byte	0: OFF 1: ON
28	PRO USE IMAGE PROCESS	1Byte	1: NORMAL 2: PURE 3: MONOTONE 4: HIGH CONTRAST
29	PRO USE SYGNAL TYPE	1Byte	1: MOTION 2: STILL 3: NONE STD
30	FRC	1Byte	0: OFF 1: ON
31	POWER ON MODE INPUT	1Byte	0: LAST 1: INPUT1 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5 A: MULTI
32	POWER ON MODE MULTI MODE	1Byte	1: SIDE BY SIDE1 2: SIDE BY SIDE2 3: SIDE BY SIDE3 4: BOTTOM LEFT 5: BOTTOM RIGHT 6: TOP RIGHT 7: TOP LEFT
33	POWER ON MODE MULTI INPUT 1	1Byte	1: INPUT1 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
34	POWER ON MODE MULTI INPUT 2	1Byte	1: INPUT1 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
35	POWER ON MODE VOLUME	2Byte	0 - 42, FF in case of last memory
36	SEAMLESS SW	1Byte	0: OFF 1: ON
37	SEAMLESS SW SELECT1	1Byte	1: INPUT1 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
38	SEAMLESS SW SELECT2	1Byte	1: INPUT1 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
39	MIRROR MODE	1Byte	0: OFF 1: X 2: Y 3: XY
40	MULTI SCREEN SET (S BY S SIZE)	1Byte	1: NORMAL 2: FULL
41	MULTI SCREEN SET (S BY S LAYOUT)	1Byte	1: MODE1 2: MODE2 3: MODE3
42	MULTI SCREEN SET (PIP SIZE)	1Byte	1: 1 (SMALL) - 4: 4 (LARGE)
43	MULTI SCREEN SET (TRANSLUCENT)	1Byte	0: OFF 1: 10% 2: 20% 3: 30% 4: 40% 5: 50% 6: 60% 7: 70% 8: 80%
44	MULTI SCREEN SET (BANNER PIP)	1Byte	0: OFF 1: TOP 2: MID HIGH 3: MID LOW 4: BOTTOM
45	MULTI SCREEN SET (BANNER INPUT)	1Byte	1: INPUT1 2: INPUT2
46	Main input function	3Byte	As the same contents as item 9 of QST command
47	Main screen size information	1Byte	As the same contents as item 11 of QST command
48	Check sum	2Byte	
49	ETX	1Byte	03hex

[QCI]: To acquire data on the time information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QCI (fixed)
3	Time information	2Byte	Time (24 hours system) 00 - 23 Note 1
		2Byte	Minute 00 - 59 Note 1
		2Byte	Seconds 00 - 59 Note 1
4	Dummy data	8Byte	
5	Days	1Byte	1: Sunday 2: Monday 3: Tuesday 4: Wednesday 5: Thursday 6: Friday 7: Saturday Note 1
6	Check sum	2Byte	
7	ETX	1Byte	03hex

Note 1 : During standby, when transmitted this command first, output the value that the power is turned off last.

[QSU]: To acquire data on the audio status

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QSU (fixed)
3	Main volume	3Byte	000 - 042
4	Audio mute state	1Byte	0: OFF 1: ON
5	INPUT1 sub volume	3Byte	000 - 020
6	INPUT2 sub volume	3Byte	000 - 020
7	INPUT3 sub volume	3Byte	000 - 020
8	INPUT4 sub volume	3Byte	000 - 020
9	INPUT5 sub volume	3Byte	000 - 020
10	Check sum	2Byte	
11	ETX	1Byte	03hex

[QSI]: To acquire data on the information of panel input video signal

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QSI (fixed)
3	Classification of the drive sequence	3Byte	50V: Video 50Hz 60V: Video 60Hz 72V: Video 72Hz 75V: Video 75Hz 60P: PC 60Hz 70P: PC 70Hz
4	Standard/nonstandard information	1Byte	S: Standard N: Nonstandard
5	Classification of the ABL / WB table	1Byte	T (fixed)
		1Byte	1 - 4
6	PCN adding up value	4Byte	Note 1
7	PRH adding up value	4Byte	Note 1
8	PGH adding up value	4Byte	Note 1
9	PBH adding up value	4Byte	Note 1
10	PBR adding up value	4Byte	Note 1
11	PRL adding up value	4Byte	Note 1
12	PGL adding up value	4Byte	Note 1
13	PBL adding up value	4Byte	Note 1
14	Dummy	2Byte	
15	Horizontal synchronization existence judgment	1Byte	Y: with H-Sync N: without H-Sync
16	Vertical synchronization existence judgment	4Byte	3051 (30.51Hz) - 9999 (99.99Hz) (Reading value X 100)
17	Dummy	4Byte	
18	APL acquisition data	4Byte	0000 - 1023
19	SUS pulse number	4Byte	0174 - 2752
20	Still picture detection state	1Byte	0: Setting OFF 1: Setting ON - During wait 2: Setting ON - During operation
21	Panel crack detection state	1Byte	
22	SCAN protection detection state	1Byte	
23	External protection detection state	1Byte	
24	Protection operation transition	1Byte	0: Brightness upper limit 1: During brightness decrease 2: Brightness lower limit 3: During brightness rises
25	Dummy	4Byte	
26	Check sum	2Byte	
27	ETX	1Byte	03hex

Note 1 : Adding up value of Panel W/B, user W/B (panel side) and deterioration correction. Transmitting data are output to ASTRA.

[QS2]: To acquire data on the panel operation information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QS2 (fixed)
3	Standby operation shift notice	1Byte	0: STB shift NG 1: STB shift OK
4	Main unit adjustment flag	1Byte	0: Adjustment is completed 1: Adjustment is not completed
5	Adjustment backup flag	1Byte	0: Exist 1: Nothing
6	PD information-1st	1Byte	0: no PD 2: POWER 3: SCAN 4: SCAN-5V 5: Y-DRV 6: Y-DC/DC 7: Y-SUS 8: ADRS 9: X-DRV A: X-DC/DC B: X-SUS C: DC/DC conveter D: ASTRA PD E: V-ADDRS F: Unknown
7	PD information-2nd	1Byte	
8	Temperature information (TEMP0)	3Byte	Note 1
9	Temperature information (TEMP1)	3Byte	Note 1
10	SD category	1Byte	0: no SD 1: ASTRA communication error 2: IIC communication error 3: RST2 abnormality 4: Temperature abnormality 6: no SD
11	SD subcategory	1Byte	0: There is no subcategory 1: General purpose EEPROM 2: BACKUP EEPROM 3: DAC IC 4: AUDIO 5: DVI 6: TEMP IC
12	Operating state with SD	1Byte	1: Normally 2: Relay OFF completion 3: Warning
13	HOUR METER	6Byte	000000 - 279620 (time) Note 2
		2Byte	00 - 59 (minutes) Note 2
14	MASK display state	1Byte	0: MASK OFF 1: MASK ON
15	Aging state	1Byte	
16	Check sum	2Byte	
17	ETX	1Byte	03hex

Note 1 : Temperature information is not actual temperature for A/D value from the temperature sensor IC.
Conversion expression: Temperature information (TEMP 0/TEMP 1) × 1.255-50.44= temperature (°C)
Note 2 : Maximum recording time is 279620 hours 16 minutes. When exceeded maximum recording time, reset to zero.

[QIP]: To acquire data on the other panel information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QIP (fixed)
3	Serial number	15Byte	15 columns of character string
4	HOUR METER	6Byte	As the same contents as item 13 of QS2 command
		2Byte	
5	BACKUP HOUR METER	6Byte	As the same contents as item 13 of QS2 command
		2Byte	
6	POWER ON COUNTER	8Byte	00000000 - 99999999
14	Check sum	2Byte	
15	ETX	1Byte	03hex

[QAJ]: To acquire data on the panel adjustment value

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QAJ (fixed)
3	V-SUS adjustment value	3Byte	000 - 255
4	V-OFT adjustment value	3Byte	000 - 255
5	V-RST-P adjustment value	3Byte	000 - 255
6	XSB adjustment value	3Byte	120 - 136
7	YSB adjustment value	3Byte	120 - 136
8	YTG adjustment value	3Byte	120 - 136
9	YTW adjustment value	3Byte	120 - 136
10	RSW adjustment value	3Byte	120 - 136
11	R-RIVICE setting value	1Byte	0 - 7
12	G-RIVICE setting value	1Byte	0 - 7
13	B-RIVICE setting value	1Byte	0 - 7
14	Check sum	2Byte	
15	ETX	1Byte	03hex

[QPW]: To acquire data on the adjustment value of panel ABL/WB

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPW (fixed)
3	Classification of the drive sequence	3Byte	As the same contents as item 3 of QSI command
4	Standard/nonstandard information	1Byte	As the same contents as item 4 of QSI command
5	Classification of the ABL / WB table	1Byte 1Byte	As the same contents as item 5 of QSI command
4	ABL adjustment value	3Byte	000 - 255
5	R-HIGH adjustment value	3Byte	000 - 511
6	G-HIGH adjustment value	3Byte	000 - 511
7	B-HIGH adjustment value	3Byte	000 - 511
8	R-LOW adjustment value	3Byte	000 - 999
9	G-LOW adjustment value	3Byte	000 - 999
10	B-LOW adjustment value	3Byte	000 - 999
11	Gamma setting	1Byte	0 - F
12	Streaking correction	1Byte	0: OFF 1: ON
13	Peripheral luminance correction	1Byte	0: OFF 1: ON 2: ON-APL interlocking
14	Dummy	1Byte	
15	APL interlocking W/B	1Byte	0: OFF 1: ON
16	Protection operation transition	1Byte	As the same contents as item 24 of QSI command
17	Dummy	1Byte	
18	Check sum	2Byte	
19	ETX	1Byte	03hex

[QPC]: To acquire data on the POWER ON COUNTER value

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPC (fixed)
3	POWER ON COUNTER	8Byte	00000000 - 99999999
4	Check sum	2Byte	
5	ETX	1Byte	03hex

[QPM]: To acquire data on the PLUSE METER

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPM (fixed)
3	Pulse meter B1	8Byte	00000000 - 99999999
4	Pulse meter B2	8Byte	00000000 - 99999999
5	Pulse meter B3	8Byte	00000000 - 99999999
6	Pulse meter B4	8Byte	00000000 - 99999999
7	Pulse meter B5	8Byte	00000000 - 99999999
8	Check sum	2Byte	
9	ETX	1Byte	03hex

[QNP]: To acquire data on the panel's serial number

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QNP (fixed)
3	Serial number	15Byte	15 columns of character string
4	Check sum	2Byte	
5	ETX	1Byte	03hex

[QPD]: To acquire data on the POWER DOWN information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPD (fixed)
3	Latest PD information-1st	1Byte	As the same contents as item 6/7 of QS2 comman
4	Latest PD information-2nd	1Byte	
5	HOUR METER for the latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
6	Second latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
7	Second latest PD infromation-2nd	1Byte	
8	HOUR METER for the second latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
9	Third latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
10	Third latest PD infromation-2nd	1Byte	
11	HOUR METER for the third latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
12	Fourth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
13	Fourth latest PD infromation-2nd	1Byte	
14	HOUR METER for the fourth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
15	Fifth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
16	Fifth latest PD infromation-2nd	1Byte	
17	HOUR METER for the fifth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
18	Sixth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
19	Sixth latest PD infromation-2nd	1Byte	
20	HOUR METER for the sixth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
21	Seventh latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
22	Seventh latest PD infromation-2nd	1Byte	
23	HOUR METER for the seventh latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
24	Eighth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
25	Eighth latest PD infromation-2nd	1Byte	
26	HOUR METER for the eighth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
27	Check sum	2Byte	
28	ETX	1Byte	03hex

[QNG]: To acquire data on the SHUT DOWN information of the main

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QNG (fixed)
3	Latest SD category	1Byte	Refer to the following table
4	Latest SD subcategory	1Byte	
5	Latest SD HOUR METER	5Byte	00000 - 99999
6	Dummy	2Byte	
7	Latest SD temperature information	3Byte	
8	Second latest SD category	1Byte	Refer to the following table
9	Second latest SD subcategory	1Byte	
10	Second latest SD HOUR METER	5Byte	00000 - 99999
11	Dummy	2Byte	
12	Second latest SD temperature information	3Byte	
13	Third latest SD category	1Byte	Refer to the following table
14	Third latest SD subcategory	1Byte	
15	Third latest SD HOUR METER	5Byte	00000 - 99999

[QNG]: To acquire data on the SHUT DOWN information of the main

Order	Data Contents	Size	Remarks
16	Dummy	2Byte	
17	Third latest SD temperature information	3Byte	
18	Fourth latest SD category	1Byte	Refer to the following table
19	Fourth latest SD subcategory	1Byte	
20	Fourth latest SD HOUR METER	5Byte	00000 - 99999
21	Dummy	2Byte	
22	Fourth latest SD temperature information	3Byte	
23	Fifth latest SD category	1Byte	Refer to the following table
24	Fifth latest SD subcategory	1Byte	
25	Fifth latest SD HOUR METER	5Byte	00000 - 99999
26	Dummy	2Byte	
27	Fifth latest SD temperature information	3Byte	
28	Sixth latest SD category	1Byte	Refer to the following table
29	Sixth latest SD subcategory	1Byte	
30	Sixth latest SD HOUR METER	5Byte	00000 - 99999
31	Dummy	2Byte	
32	Sixth latest SD temperature information	3Byte	
33	Seventh latest SD category	1Byte	Refer to the following table
34	Seventh latest SD subcategory	1Byte	
35	Seventh latest SD HOUR METER	5Byte	00000 - 99999
36	Dummy	2Byte	
37	Seventh latest SD temperature information	3Byte	
38	Eighth latest SD category	1Byte	Refer to the following table
39	Eighth latest SD subcategory	1Byte	
40	Eighth latest SD HOUR METER	5Byte	00000 - 99999
41	Dummy	2Byte	
42	Eighth latest SD temperature information	3Byte	
43	Check sum	2Byte	
44	ETX	1Byte	03hex

SD category / SD subcategory

Category	Subcategory
0: No SD (no abnormality)	0: No subcategory
5: Speaker short-circuit	0: No subcategory
6: Module microcomputer communication failure	0: No subcategory
8: IIC communication failure	1: EEPROM communication failure
	3: VIDEO SLOT IC1 (CVBS) communication failure
	4: VIDEO SLOT IC1 (Y/C) communication failure
	5: A/D Main (A system) communication failure
	6: A/D Sub (B system) communication failure
	7: IC6 communication failure
	F: VIDEO SLOT EEPROM communication failure
	J: AUDIO CONTROL IC communication failure
	K: Expansion I/O2 communication failure
A: FAN stop	1: FAN stop
B: Temperature abnormality (high temperature)	1: High temperature of temperature sensor 1
	2: High temperature of temperature sensor 2
	3: High temperature of temperature sensor 3
	4: High temperature of temperature sensor 4
D: Power supply voltage abnormality	0: No subcategory
F: Other abnormality	1: RLS cable comes off
	2: DC reducing voltage for COMM SLOT
	3: DC reducing voltage for VIDEO SLOT
9: Failure except the above (main microcomputer failure)	0: No subcategory

[QSD]: To acquire data on the SHUT DOWN information of the panel

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QSD (fixed)
3	Latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
4	Latest SD subcategory	1Byte	
5	Latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
6	Second latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
7	Second latest SD subcategory	1Byte	
8	Second latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
9	Third latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
10	Third latest SD subcategory	1Byte	
11	Third latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
12	Fourth latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
13	Fourth latest SD subcategory	1Byte	
14	Fourth latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
15	Fifth latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
16	Fifth latest SD subcategory	1Byte	
17	Fifth latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
18	Sixth latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
19	Sixth latest SD subcategory	1Byte	
20	Sixth latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
21	Seventh latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
22	Seventh latest SD subcategory	1Byte	
23	Seventh latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
24	Eighth latest SD category	1Byte	As the same contents as item 10/11 of QS2 comman
25	Eighth latest SD subcategory	1Byte	
26	Eighth latest SD HOUR METER	6Byte 2Byte	As the same contents as item 13 of QS2 comman
27	Check sum	2Byte	
28	ETX	1Byte	03hex

[QAMS00 - QAMS03]: To acquire data on the W/B auto adjustment data of MAIN Assy

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QAM (fixed)
3	G-BI/Y-PD adjustment value	3Byte	
4	B-BI/Pb-PD adjustment value	3Byte	
5	R-BI/Pr-PD adjustment value	3Byte	
6	G-DR/Y-DR adjustment value	3Byte	
7	B-DR/Pb-DR adjustment value	3Byte	
8	R-DR/Pr-DR adjustment value	3Byte	
9	Check sum	2Byte	
10	ETX	1Byte	03hex

[QAMS04 - QAMS05]: To acquire data on the LPF auto adjustment data of MAIN Assy

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QAM (fixed)
3	480I-N adjustment value	3Byte	
4	480I-F adjustment value	3Byte	
5	480P-N adjustment value	3Byte	
6	480P-F adjustment value	3Byte	
7	1080i adjustment value	3Byte	
8	720p adjustment value	3Byte	
9	1080p adjustment value	3Byte	
10	Check sum	2Byte	
11	ETX	1Byte	03hex

■ Normal operation related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
POWER							
POF	Turning the power OFF	O	O	-	-	-	
PON	Turning the power ON	-	O	-	-	-	
INPUT SELECT							
INPS01	Switching the main screen to input 1	O	O	-	-	-	
INPS02	Switching the main screen to input 2	O	O	-	-	-	
INPS03	Switching the main screen to input 3	O	O	-	-	-	
INPS04	Switching the main screen to input 4	O	O	-	-	-	
INPS05	Switching the main screen to input 5	O	O	-	-	-	
SSIS01	Switching the sub screen to input 1	-	O	-	-	-	
SSIS02	Switching the sub screen to input 2	-	O	-	-	-	
SSIS03	Switching the sub screen to input 3	-	O	-	-	-	
SSIS04	Switching the sub screen to input 4	-	O	-	-	-	
SSIS05	Switching the sub screen to input 5	-	O	-	-	-	
SWM	Full-screen outputs the main input	O	O	-	-	-	
SWS	Full-screen outputs the sub input	O	O	-	-	-	
SCREEN SIZE							
AST	Execution of auto setup	O	O	-	-	-	
SZMS00	Setting the screen size to Dot by Dot	O	O	-	-	-	
SZMS01	Setting the screen size to 4 :3	O	O	-	-	-	
SZMS02	Setting the screen size to FULL	O	O	-	-	-	
SZMS03	Setting the screen size to ZOOM	O	O	-	-	-	
SZMS05	Setting the screen size to WIDE	O	O	-	-	-	
SZMS06	Setting the screen size to 14:9	O	O	-	-	-	
SZMS09	Setting the screen size to UNDERSCAN	O	O	-	-	-	
SZMS10	Setting the screen size to 2.35:1	O	O	-	-	-	
VIDEO							
PMTS00	Turning the video mute OFF	O	O	-	-	-	
PMTS01	Turning the video mute ON	O	O	-	-	-	
STLS00	Cancelling the video freeze	-	O	-	-	-	
STLS01	Freezing the video	-	O	-	-	-	
AUDIO							
AMTS00	Turning the audio mute OFF	O	O	-	-	-	
AMTS01	Turning the audio mute ON	O	O	-	-	-	
VOL***	Adjusting the audio volume	O	O	O	000	042	
AUSS01	Setting the audio source to main	O	O	-	-	-	
AUSS02	Setting the audio source to sub	O	O	-	-	-	
MULTI SCREEN							
MSCS00	Setting the multi screen to OFF	-	O	-	-	-	
MSSS01	Setting the PinP sub-screen size to 1	-	O	-	-	-	
MSSS02	Setting the PinP sub-screen size to 2	-	O	-	-	-	
MSSS03	Setting the PinP sub-screen size to 3	-	O	-	-	-	
MSSS04	Setting the PinP sub-screen size to 4	-	O	-	-	-	
MSTS01	Setting the multi screen to 2_SCREEN (side by side 1)	-	O	-	-	-	
MSTS02	Setting the multi screen to PinP (lower right)	-	O	-	-	-	
MSTS03	Setting the multi screen to PinP (upper right)	-	O	-	-	-	
MSTS04	Setting the multi screen to PinP (upper left)	-	O	-	-	-	
MSTS05	Setting the multi screen to PinP (lower left)	-	O	-	-	-	
MSTS06	Setting the multi screen to PoutP (side by side 2-L)	-	O	-	-	-	
MSTS08	Multi screen SWAP (Switch the main/sub screen)	-	O	-	-	-	
MSTS09	Setting the multi screen to PoutP (side by side 2-R)	-	O	-	-	-	
MSTS10	Setting the multi screen to 2_SCREEN (side by side 3)	-	O	-	-	-	
MSTS11	Setting the multi screen to PoutP (side by side 4-L)	-	O	-	-	-	
MSTS12	Setting the multi screen to PoutP (side by side 4-R)	-	O	-	-	-	

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
FUNCTIONAL LOCK							
FCLS00	Cancelling the functional lock	-	O	-	-	-	
FCLS01	Prohibiting the button operation of the main unit	-	O	-	-	-	
FCLS02	Prohibiting the button operation of the remote controller	-	O	-	-	-	
FCLS03	Prohibiting the button operation of the main unit and remote controller	-	O	-	-	-	
FCLS04	Setting the memory lock	-	O	-	-	-	
OSD							
DOF	Erasing the currently OSD displyed indications	O	O	-	-	-	
DISPLAY CALL							
DITS01	Displaying the DISPLAY CALL 1	O	O	-	-	-	
DITS02	Displaying the DISPLAY CALL 2	O	O	-	-	-	
IM0***	Writing the INFORMATION (1-3 characters)	O	O	-	-	-	
IM1***	Writing the INFORMATION (4-6 characters)	O	O	-	-	-	
IM2***	Writing the INFORMATION (7-9 characters)	O	O	-	-	-	
IM3***	Writing the INFORMATION (10-12 characters)	O	O	-	-	-	
IM4***	Writing the INFORMATION (13-15 characters)	O	O	-	-	-	
IM5***	Writing the INFORMATION (16-18 characters)	O	O	-	-	-	
IM6***	Writing the INFORMATION (19-21 characters)	O	O	-	-	-	
IMD	Clearing the INFORMATION	O	O	-	-	-	

[MENU] - [SETUP] related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
COLOR TEMP.							
CTPS01	Setting the color temperature to LOW	-	O	-	-	-	
CTPS02	Setting the color temperature to MID LOW	-	O	-	-	-	
CTPS03	Setting the color temperature to MIDDLE	-	O	-	-	-	
CTPS04	Setting the color temperature to MID HIGH	-	O	-	-	-	
CTPS05	Setting the color temperature to HIGH	-	O	-	-	-	
DNR							
DNRS00	Setting the digital NR to OFF	-	O	-	-	-	
DNRS01	Setting the digital NR to LOW	-	O	-	-	-	
DNRS02	Setting the digital NR to MIDDLE	-	O	-	-	-	
DNRS03	Setting the digital NR to HIGH	-	O	-	-	-	
MPEG NR							
MNRS00	Setting the MPEG NR to OFF	-	O	-	-	-	
MNRS01	Setting the MPEG NR to LOW	-	O	-	-	-	
MNRS02	Setting the MPEG NR to MIDDLE	-	O	-	-	-	
MNRS03	Setting the MPEG NR to HIGH	-	O	-	-	-	
CTI							
CTRS00	Turning the CTI OFF	-	O	-	-	-	
CTRS01	Turning the CTI ON	-	O	-	-	-	
PURE CINEMA							
PUCS00	Turning the pure cinema OFF	-	O	-	-	-	
PUCS01	Setting the pure cinema to standard	-	O	-	-	-	
COLOR DECODING							
MCDS01	Setting the color difference selection to RGB (VIDEO)	O	O	-	-	-	
MCDS02	Setting the color difference selection to COMPONENT1 (Y CbCr)	O	O	-	-	-	
MCDS03	Setting the color difference selection to COMPONENT2 (Y PbPr)	O	O	-	-	-	
COLOR SYSTEM							
CLSS01	Setting the color system to AUTO	-	O	-	-	-	
CLSS02	Setting the color system to NTSC	-	O	-	-	-	
CLSS03	Setting the color system to PAL	-	O	-	-	-	
CLSS04	Setting the color system to SECAM	-	O	-	-	-	
CLSS05	Setting the color system to 4.43NTSC	-	O	-	-	-	
CLSS06	Setting the color system to PAL M	-	O	-	-	-	
CLSS07	Setting the color system to PAL N	-	O	-	-	-	
SIGNAL FORMAT							
SFTS10	Setting the signal format to AUTO	O	O	-	-	-	
SFTS01	Setting the signal format to Type1	O	O	-	-	-	
SFTS02	Setting the signal format to Type2	O	O	-	-	-	
SFTS03	Setting the signal format to Type3	O	O	-	-	-	
SFTS04	Setting the signal format to Type4	O	O	-	-	-	
SFTS05	Setting the signal format to Type5	O	O	-	-	-	
SFTS06	Setting the signal format to Type6	O	O	-	-	-	
SFTS07	Setting the signal format to Type7	O	O	-	-	-	
SFTS08	Setting the signal format to Type8	O	O	-	-	-	
DVI							
DSGS01	Setting the DVI connecting signal to PC	O	O	-	-	-	
DSGS02	Setting the DVI connecting signal to STB/DVD	O	O	-	-	-	
DBLS01	Setting the DVI black level to LOW	O	O	-	-	-	
DBLS02	Setting the DVI black level to HIGH	O	O	-	-	-	

[MENU] - [OPTION] related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
ENERGY SAVE							
ESVS00	Turning the power-saving setting to standard	-	O	-	-	-	
ESVS01	Turning the power-saving setting to power save	-	O	-	-	-	
ESVS02	Turning the power-saving setting to brightness fixing	-	O	-	-	-	
ESVS03	Turning the power-saving setting to mode 3 (longevity life)	-	O	-	-	-	
ESVS04	Turning the power-saving setting to auto	-	O	-	-	-	
TIMER							
TSMS00	Turning the summer time OFF	-	O	-	-	-	
TSMS01	Turning the summer time ON	-	O	-	-	-	
TPH***	Setting the time of current time	O	O	O	000	023	
TPM***	Setting the minute of current time	O	O	O	000	059	
TPW***	Setting the day of current time	O	O	O	001	007	
TPTS00	Turning the program timer OFF	-	O	-	-	-	
TPTS01	Turning the program timer ON	-	O	-	-	-	
ORBITER							
ORBS00	Turning the orbiter OFF	-	O	-	-	-	
ORBS01	Turning the orbiter ON (AUTO1)	-	O	-	-	-	
ORBS02	Turning the orbiter ON (AUTO2)	-	O	-	-	-	
ORBS03	Turning the orbiter ON (AUTO3)	-	O	-	-	-	
SOFT FOCUS							
SOFS00	Turning the soft focus OFF	-	O	-	-	-	
SOFS01	Setting the soft focut to 1	-	O	-	-	-	
SOFS02	Setting the soft focut to 2	-	O	-	-	-	
SOFS03	Setting the soft focut to 3	-	O	-	-	-	
SOFS04	Setting the soft focut to 4	-	O	-	-	-	
SUB SCREEN FREEZE							
SSTS00	Setting the sub screen FREEZE to OFF	-	O	-	-	-	
SSTS01	Setting the sub screen FREEZE to SIDE BY SIDE	-	O	-	-	-	
SSTS02	Setting the sub screen FREEZE to PinP	-	O	-	-	-	

[INTEGRATOR] - [PICTURE] related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
VIDEO QUALITY							
CNT***	Adjusting the contrast	-	O	O	000	255	
BRT***	Adjusting the brightness	-	O	O	000	255	
ENH***	Adjusting the horizontal enhance	-	O	O	000	015	
ENV***	Adjusting the vertical enhance	-	O	O	000	015	
COL***	Adjusting the color	-	O	O	000	127	
TNT***	Adjusting the tint	-	O	O	000	060	
SHP***	Adjusting the sharpness	-	O	O	000	015	
WHITE BALANCE							
RHI***	Adjusting the R.HIGH	-	O	O	000	255	
GHI***	Adjusting the G.HIGH	-	O	O	000	255	
BHI***	Adjusting the B.HIGH	-	O	O	000	255	
GLW***	Adjusting the G.LOW	-	O	O	000	255	
RLW***	Adjusting the R.LOW	-	O	O	000	255	
BLW***	Adjusting the B.LOW	-	O	O	000	255	
COLOR DETAIL							
CGR***	Adjusting the color detail red	-	O	O	000	060	
CGY***	Adjusting the color detail yellow	-	O	O	000	060	
CGG***	Adjusting the color detail green	-	O	O	000	060	
CGC***	Adjusting the color detail cyan	-	O	O	000	060	
CGB***	Adjusting the color detail blue	-	O	O	000	060	
CGM***	Adjusting the color detail magenta	-	O	O	000	060	
GAMMA							
GRAS18	Setting the gradation to "GAMMA 1.8"	-	O	-	-	-	
GRAS19	Setting the gradation to "GAMMA 1.9"	-	O	-	-	-	
GRAS20	Setting the gradation to "GAMMA 2.0"	-	O	-	-	-	
GRAS21	Setting the gradation to "GAMMA 2.1"	-	O	-	-	-	
GRAS22	Setting the gradation to "GAMMA 2.2"	-	O	-	-	-	
GRAS23	Setting the gradation to "GAMMA 2.3"	-	O	-	-	-	
GRAS24	Setting the gradation to "GAMMA 2.4"	-	O	-	-	-	
GRAS02	Setting the gradation to "GAMMA 1.8"	-	O	-	-	-	
GRAS01	Setting the gradation to "GAMMA 2.0"	-	O	-	-	-	
GRAS03	Setting the gradation to "GAMMA 2.2"	-	O	-	-	-	
PRESET							
STD	Returning the PICTURE and W/B of integrator to the factory shipment value (initial value)	-	O	-	-	-	

[INTEGRATOR] - [SCREEN] related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
POSITION							
HPS***	Adjusting the horizontal position	-	O	O	000	255	
VPS***	Adjusting the vertical position	-	O	O	000	255	
CLOCK/PHASE							
CFR***	Adjusting the CLOCK (PLL frequency)	-	O	O	000	255	
CPH***	Adjusting the PHASE (PLL phase)	-	O	O	000	031	
SIZE							
HSI***	H.SIZE adjustment	-	O	O	000	064	
VSI***	V.SIZE adjustment	-	O	O	000	064	
PRESET							
FRP	Initializing each adjustment value of integrator/screen	O	O	-	-	-	

[INTEGRATOR] - [SETUP] related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
SUB VOLUME							
SVL***	Adjusting the sub volume	O	O	O	000	020	

[INTEGRATOR] - [OPTION] related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
SCREEN MASK							
FMKS00	Turning the screen mask OFF	-	O	-	-	-	
FMKS02	Screen mask: Turning the inverse (negative positive inversion) on	-	O	-	-	-	
FMKS03	Screen mask: Turning the white mask ON	-	O	-	-	-	
FMKS04	Screen mask: Turning the red mask ON	-	O	-	-	-	
FMKS05	Screen mask: Turning the green mask ON	-	O	-	-	-	
FMKS06	Screen mask: Turning the blue mask ON	-	O	-	-	-	
FMKS07	Screen mask: Turning the yellow mask ON	-	O	-	-	-	
SIDE MASK							
RSL***	Adjusting the side mask RED	-	O	O	000	255	
GSL***	Adjusting the side mask GREEN	-	O	O	000	255	
BSL***	Adjusting the side mask BLUE	-	O	O	000	255	
VIDEO WALL							
MGFS00	Turning the video wall OFF	-	O	-	-	-	
MGFS11	Setting the video wall to DIVIDER: 1	-	O	-	-	-	
MGFS12	Setting the video wall to DIVIDER: 4	-	O	-	-	-	
MGFS13	Setting the video wall to DIVIDER: 9	-	O	-	-	-	
MGFS14	Setting the video wall to DIVIDER: 16	-	O	-	-	-	
MGFS15	Setting the video wall to DIVIDER: 25	-	O	-	-	-	
MGPSnn	nn=01-04:DIVIDER= Set display position of 4:00 (there is no joint consideration)	-	O	-	-	-	
	nn=05-08:DIVIDER= Set display position of 4:00 (there is joint consideration)	-	O	-	-	-	
	nn=10-18:DIVIDER= Set display position of 9:00 (there is no joint consideration)	-	O	-	-	-	
	nn=20-28:DIVIDER= Set display position of 9:00 (there is joint consideration)	-	O	-	-	-	
	nn=30-3F:DIVIDER= Set display position of 16:00 (there is no joint consideration)	-	O	-	-	-	
	nn=40-4F:DIVIDER= Set display position of 16:00 (there is joint consideration)	-	O	-	-	-	
	nn=50-68:DIVIDER= Set display position of 25:00 (there is no joint consideration)	-	O	-	-	-	
	nn=70-88:DIVIDER= Set display position of 25:00 (there is joint consideration)	-	O	-	-	-	
IDA	Executing the auto ID setting	O	O	-	-	-	
PDES00	Turning the power-on delay mode OFF	-	O	-	-	-	
PDES01	Turning the power-on delay mode ON (except for more than 16 sides systems) or setting it to mode 1 (for more than 16 sides systems)	-	O	-	-	-	
PDES02	Setting the power-on delay mode to mode 2 (for more than 16 sides systems)	-	O	-	-	-	
LNKS00	ABL link: OFF	O	O	-	-	-	
LNKS01	ABL link: ON	O	O	-	-	-	
RS-232C							
BRAS01	Setting the RS-232C baud rate to 1200bps	O	O	-	-	-	
BRAS02	Setting the RS-232C baud rate to 2400bps	O	O	-	-	-	
BRAS03	Setting the RS-232C baud rate to 4800bps	O	O	-	-	-	
BRAS04	Setting the RS-232C baud rate to 9600bps	O	O	-	-	-	
BRAS05	Setting the RS-232C baud rate to 19200bps	O	O	-	-	-	
BRAS06	Setting the RS-232C baud rate to 38400bps	O	O	-	-	-	
ID NUMBER							
IDC	Clearing the ID	O	O	-	-	-	
IDS	Setting the ID	O	O	-	-	-	

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
FAN CONTROL							
FCM	Maximizing the fan roll control	O	O	-	-	-	
FCA	Turning the fan roll control to auto	O	O	-	-	-	
OSD							
OSDS00	Turning the OSD display OFF	O	O	-	-	-	
OSDS01	Turning the OSD display ON	O	O	-	-	-	
OSSS01	Turning the OSD size to enlarged display	-	O	-	-	-	
OSSS02	Turning the OSD size to reduced display	-	O	-	-	-	
OSAS01	Setting the OSD display angle to horizontality	-	O	-	-	-	
OSAS02	Setting the OSD display angle to verticality	-	O	-	-	-	
FRONT INDICATOR							
LESS00	Front indicator: OFF	O	O	-	-	-	
LESS01	Front indicator: ON	O	O	-	-	-	
COLOR MODE							
CLMS00	Setting the color mode to normal	-	O	-	-	-	
CLMS01	Setting the color mode to studio	-	O	-	-	-	
UNDER SCAN							
USCS00	Turning the UNDERSCAN OFF	-	O	-	-	-	
USCS01	Turning the UNDERSCAN ON	-	O	-	-	-	
IMAGE PROCESS							
IPRS01	Setting the IMAGE PROCESS to NORMAL	-	O	-	-	-	
IPRS02	Setting the IMAGE PROCESS to PURE	-	O	-	-	-	
IPRS03	Setting the IMAGE PROCESS to MONOTONE	-	O	-	-	-	
IPRS04	Setting the IMAGE PROCESS to HIGH CONTRAST	-	O	-	-	-	
FRC							
FRCS00	Turning the FRC OFF	-	O	-	-	-	
FRCS01	Turning the FRC ON	-	O	-	-	-	
SEAMLESS INPUT SWITCH							
SLSS00	Turning the SEAMLESS input switch mode OFF	-	O	-	-	-	
SLSS01	Turning the SEAMLESS input switch mode ON	-	O	-	-	-	
SL1S01	Setting the SEAMLESS SW SELECT 1 to INPUT1	-	O	-	-	-	
SL1S02	Setting the SEAMLESS SW SELECT 1 to INPUT2	-	O	-	-	-	
SL1S03	Setting the SEAMLESS SW SELECT 1 to INPUT3	-	O	-	-	-	
SL1S04	Setting the SEAMLESS SW SELECT 1 to INPUT4	-	O	-	-	-	
SL1S05	Setting the SEAMLESS SW SELECT 1 to INPUT5	-	O	-	-	-	
SL2S01	Setting the SEAMLESS SW SELECT 2 to INPUT1	-	O	-	-	-	
SL2S02	Setting the SEAMLESS SW SELECT 2 to INPUT2	-	O	-	-	-	
SL2S03	Setting the SEAMLESS SW SELECT 2 to INPUT3	-	O	-	-	-	
SL2S04	Setting the SEAMLESS SW SELECT 2 to INPUT4	-	O	-	-	-	
SL2S05	Setting the SEAMLESS SW SELECT 2 to INPUT5	-	O	-	-	-	
MIRROR							
MIRS00	Turning the mirror mode OFF (normal display)	-	O	-	-	-	
MIRS01	Reversing the right and left at mirror mode	-	O	-	-	-	
MIRS02	Reversing the top and bottom at mirror mode	-	O	-	-	-	
MIRS03	Reversing the right/left and top/bottom at mirror mode	-	O	-	-	-	

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
MULTI SCREEN							
PTRS00	Setting the sub-screen transmittance to OFF (0%)	-	O	-	-	-	
PTRS01	Setting the sub-screen transmittance to 10%	-	O	-	-	-	
PTRS02	Setting the sub-screen transmittance to 20%	-	O	-	-	-	
PTRS03	Setting the sub-screen transmittance to 30%	-	O	-	-	-	
PTRS04	Setting the sub-screen transmittance to 40%	-	O	-	-	-	
PTRS05	Setting the sub-screen transmittance to 50%	-	O	-	-	-	
PTRS06	Setting the sub-screen transmittance to 60%	-	O	-	-	-	
PTRS07	Setting the sub-screen transmittance to 70%	-	O	-	-	-	
PTRS08	Setting the sub-screen transmittance to 80%	-	O	-	-	-	
BPIS01	Setting the BANNER PinP input to INPUT1	-	O	-	-	-	
BPIS02	Setting the BANNER PinP input to INPUT2	-	O	-	-	-	
BPPS00	Setting the BANNER PinP to OFF	-	O	-	-	-	
BPPS01	Setting the BANNER PinP to TOP	-	O	-	-	-	
BPPS02	Setting the BANNER PinP to MID-HIGH	-	O	-	-	-	
BPPS03	Setting the BANNER PinP to MID-LOW	-	O	-	-	-	
BPPS04	Setting the BANNER PinP to BOTTOM	-	O	-	-	-	
FUNCTION DEFAULT							
FDT	Executing the FUNCTION DEFAULT	-	O	-	-	-	

■ Other command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
MODE SWITCH (DUMMY)							
AJN	Finishing the 232C integrator adjustment mode	-	O	-	-	-	Perform only response (do not perform the mode switch)
AJY	Starting the 232C integrator adjustment mode	-	O	-	-	-	
AUXILIARY COMMAND							
DW0	Decreasing the adjustment value by 10	O	O	-	-	-	
DWF	Minimizing the adjustment value	O	O	-	-	-	
DWn	Decreasing the adjustment value by n (n=1 to 9)	O	O	-	-	-	
UP0	Increasing the adjustment value by 10	O	O	-	-	-	
UPF	Maximizing the adjustment value	O	O	-	-	-	
UPn	Increasing the adjustment value by n (n =1 to 9)	O	O	-	-	-	

■ Factory related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
Operation mode selection							
FAN	Turning the factory mode OFF	O	-	-	-	-	
FAY	Turning the factory mode ON	-	O	-	-	-	
FALS00	Turning the factory mode lock OFF	O	-	-	-	-	
FALS01	Turning the factory mode ON	O	-	-	-	-	
Power supply control of drive system							
DRVS00	Turning the power of drive system OFF	O	O	-	-	-	
DRVS01	Turning the power of drive system ON	O	O	-	-	-	
Various adjustment of the main side							
MAJS00	Starting the W/B and LPF auto adjustment of the MAIN Assy	O	-	-	-	-	
MAJS01	Forcibly finishing the W/B and LPF auto adjustment of the MAIN Assy	O	-	-	-	-	
ADC***	Adjusting the AD contrast	O	-	O	000	255	
MRG***	Adjusting the R GAIN of AD MAIN	O	-	O	000	255	
MRO***	Adjusting the R OFFSET of AD MAIN	O	-	O	000	255	
MGG***	Adjusting the G GAIN of AD MAIN	O	-	O	000	255	
MGO***	Adjusting the G OFFSET of AD MAIN	O	-	O	000	255	
MBG***	Adjusting the B GAIN of AD MAIN	O	-	O	000	255	
MBO***	Adjusting the B OFFSET of AD MAIN	O	-	O	000	255	
SRG***	Adjusting the R GAIN of AD SUB	O	-	O	000	255	
SRO***	Adjusting the R OFFSET of AD SUB	O	-	O	000	255	
SGG***	Adjusting the G GAIN of AD SUB	O	-	O	000	255	
SGO***	Adjusting the G OFFSET of AD SUB	O	-	O	000	255	
SBG***	Adjusting the B GAIN of AD SUB	O	-	O	000	255	
SBO***	Adjusting the B OFFSET of AD SUB	O	-	O	000	255	
Various control of the main side							
FCNS00	Setting the fan roll control to stop	O	-	-	-	-	
FCNS01	Setting the fan roll control to maximum	O	-	-	-	-	
FCNS02	Setting the fan roll control to middle	O	-	-	-	-	
FCNS03	Setting the fan roll control to weak	O	-	-	-	-	
FCNS04	Setting the fan roll control to auto	O	-	-	-	-	
FCNS99	Setting the fan roll control to TEST	O	-	-	-	-	
FOF	Requesting the fan abnormality detection	O	-	-	-	-	
LEDS00	Turning off the all front indicators	O	-	-	-	-	
LEDS02	Setting the front indicators to normal operation	O	-	-	-	-	
LEDS10	Front indicators: ON (green)	O	-	-	-	-	
LEDS11	Front indicators: STANDBY (red)	O	-	-	-	-	
EDWS00	Prohibiting writing of EDID data	O	-	-	-	-	
EDWS01	Permitting writing of EDID data	O	-	-	-	-	
EPAS00	Prohibiting EEPROM access from the outside	O	-	-	-	-	
EPAS01	Permitting EEPROM access from the outside	O	-	-	-	-	

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
Various adjustment of the panel side							
ABL***	Adjusting the power upper limit value (ABL)	O	-	O	000	255	
PRH***	Adjusting the R HIGH of panel W/B	O	-	O	000	511	
PGH***	Adjusting the G HIGH of panel W/B	O	-	O	000	511	
PBH***	Adjusting the B HIGH of panel W/B	O	-	O	000	511	
PRL***	Adjusting the R LOW of panel W/B	O	-	O	000	999	
PGL***	Adjusting the G LOW of panel W/B	O	-	O	000	999	
PBL***	Adjusting the B LOW of panel W/B	O	-	O	000	999	
VOF***	Adjusting the offset voltage	O	-	O	000	255	
VRP***	Adjusting the P-RST voltage	O	-	O	000	255	
VSU***	Adjusting the sus voltage	O	-	O	000	255	
RSW***	Adjusting the XY-RST width	O	-	O	120	136	
XSB***	Adjusting the X-SUS B timing	O	-	O	120	136	
YSB***	Adjusting the Y-SUS B timing	O	-	O	120	136	
YTG***	Adjusting the Y-SUS TAIL timing	O	-	O	120	136	
YTW***	Adjusting the Y-SUS TAIL width	O	-	O	120	136	
Various control of the panel side							
PAVS00	Setting the panel drive mode to TYPE-A VD-factory	O	O	-	-	-	
PAVS01	Setting the panel drive mode to TYPE-A VD-STD	O	O	-	-	-	
PAVS02	Setting the panel drive mode to TYPE-A VD-dynamic	O	O	-	-	-	
PAVS03	Setting the panel drive mode to TYPE-A VD-movie	O	O	-	-	-	
PAVS04	Setting the panel drive mode to TYPE-A VD-game	O	O	-	-	-	
PAVS05	Setting the panel drive mode to TYPE-A VD-movie2	O	O	-	-	-	
PAVS06	Setting the panel drive mode to TYPE-A VD-viewer	O	O	-	-	-	
PAVS07	Setting the panel drive mode to TYPE-A VD-USER	O	O	-	-	-	
PAVS08	Setting the panel drive mode to TYPE-A VD-ISFDAY	O	O	-	-	-	
PAVS09	Setting the panel drive mode to TYPE-A VD-ISFNGT	O	O	-	-	-	
PAVS10	Setting the panel drive mode to TYPE-B VD-factory	O	O	-	-	-	
PAVS11	Setting the panel drive mode to TYPE-B VD-STD	O	O	-	-	-	
PAVS12	Setting the panel drive mode to TYPE-B VD-dynamic	O	O	-	-	-	
PAVS13	Setting the panel drive mode to TYPE-B VD-movie	O	O	-	-	-	
PAVS14	Setting the panel drive mode to TYPE-B VD-game	O	O	-	-	-	
PAVS15	Setting the panel drive mode to TYPE-B VD-movie2	O	O	-	-	-	
PAVS16	Setting the panel drive mode to TYPE-B VD-viewer	O	O	-	-	-	
PAVS17	Setting the panel drive mode to TYPE-B VD-USER	O	O	-	-	-	
PAVS18	Setting the panel drive mode to TYPE-B VD-ISFDAY	O	O	-	-	-	
PAVS19	Setting the panel drive mode to TYPE-B VD-ISFNGT	O	O	-	-	-	
PAVS30	Setting the panel drive mode to TYPE-A PC-factory	O	O	-	-	-	
PAVS31	Setting the panel drive mode to TYPE-A PC-STD	O	O	-	-	-	
PAVS37	Setting the panel drive mode to TYPE-A PC-USER	O	O	-	-	-	
PAVS38	Setting the panel drive mode to TYPE-A PC-ISFDAY	O	O	-	-	-	
PAVS39	Setting the panel drive mode to TYPE-A PC-ISFNGT	O	O	-	-	-	
PAVS40	Setting the panel drive mode to TYPE-B PC-factory	O	O	-	-	-	
PAVS41	Setting the panel drive mode to TYPE-B PC-STD	O	O	-	-	-	
PAVS47	Setting the panel drive mode to TYPE-B PC-USER	O	O	-	-	-	
PAVS48	Setting the panel drive mode to TYPE-B PC-ISFDAY	O	O	-	-	-	
PAVS49	Setting the panel drive mode to TYPE-B PC-ISFNGT	O	O	-	-	-	

[QPD]: To acquire data on the POWER DOWN information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPD (fixed)
3	Latest PD information-1st	1Byte	As the same contents as item 6/7 of QS2 comman
4	Latest PD information-2nd	1Byte	
5	HOUR METER for the latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
6	Second latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
7	Second latest PD infromation-2nd	1Byte	
8	HOUR METER for the second latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
9	Third latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
10	Third latest PD infromation-2nd	1Byte	
11	HOUR METER for the third latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
12	Fourth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
13	Fourth latest PD infromation-2nd	1Byte	
14	HOUR METER for the fourth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
15	Fifth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
16	Fifth latest PD infromation-2nd	1Byte	
17	HOUR METER for the fifth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
18	Sixth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
19	Sixth latest PD infromation-2nd	1Byte	
20	HOUR METER for the sixth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
21	Seventh latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
22	Seventh latest PD infromation-2nd	1Byte	
23	HOUR METER for the seventh latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
24	Eighth latest PD infromation-1st	1Byte	As the same contents as item 6/7 of QS2 comman
25	Eighth latest PD infromation-2nd	1Byte	
26	HOUR METER for the eighth latest PD	6Byte	As the same contents as item 13 of QS2 comman
		2Byte	
27	Check sum	2Byte	
28	ETX	1Byte	03hex

[QNG]: To acquire data on the SHUT DOWN information of the main

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QNG (fixed)
3	Latest SD category	1Byte	Refer to the following table
4	Latest SD subcategory	1Byte	
5	Latest SD HOUR METER	5Byte	00000 - 99999
6	Dummy	2Byte	
7	Latest SD temperature information	3Byte	
8	Second latest SD category	1Byte	Refer to the following table
9	Second latest SD subcategory	1Byte	
10	Second latest SD HOUR METER	5Byte	00000 - 99999
11	Dummy	2Byte	
12	Second latest SD temperature information	3Byte	
13	Third latest SD category	1Byte	Refer to the following table
14	Third latest SD subcategory	1Byte	
15	Third latest SD HOUR METER	5Byte	00000 - 99999

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
Mask indication							
VFQS01	Setting the frequency in mask mode to VIDEO-48Hz	O	-	-	-	-	
VFQS02	Setting the frequency in mask mode to VIDEO-50Hz	O	-	-	-	-	
VFQS03	Setting the frequency in mask mode to VIDEO-60Hz	O	-	-	-	-	
VFQS05	Setting the frequency in mask mode to VIDEO-72Hz	O	-	-	-	-	
VFQS06	Setting the frequency in mask mode to VIDEO-75Hz	O	-	-	-	-	
VFQS13	Setting the frequency in mask mode to PC-60Hz	O	-	-	-	-	
VFQS14	Setting the frequency in mask mode to PC-70Hz	O	-	-	-	-	
VFQS22	Setting the frequency in mask mode to VIDEO-50Hz NONSTD	O	-	-	-	-	
VFQS23	Setting the frequency in mask mode to VIDEO-60Hz NONSTD	O	-	-	-	-	
VFQS25	Setting the frequency in mask mode to VIDEO-72Hz NONSTD	O	-	-	-	-	
VFQS26	Setting the frequency in mask mode to VIDEO-75Hz NONSTD	O	-	-	-	-	
MKCS00	Turning the mask off	O	O	-	-	-	
MKCS01	Combination mask COMB01: set to H RAMP (lean 1) M	O	-	-	-	-	
MKCS02	Combination mask COMB02: set to H RAMP (lean 4) M	O	-	-	-	-	
MKCS03	Combination mask COMB03: set to slant RAMP M	O	-	-	-	-	
MKCS04	Combination mask COMB04: set to 30 for aging	O	-	-	-	-	
MKCS05	Combination mask COMB05: set to 05 for aging	O	-	-	-	-	
MKCS06	Combination mask COMB06: set to residual image erase 1	O	-	-	-	-	
MKCS07	Combination mask COMB07: set to residual image erase 2	O	-	-	-	-	
MKCS08	Combination mask COMB08: set to white (luminance change)	O	-	-	-	-	
MKCS09	Combination mask COMB09: set to PEAK detection raster	O	-	-	-	-	
MKSS00	Turning the mask off	O	O	-	-	-	
MKSS01	Pattern mask PATTERN01: set to H RAMP (lean 1)	O	-	-	-	-	
MKSS02	Pattern mask PATTERN02: set to H RAMP (lean 4)	O	-	-	-	-	
MKSS03	Pattern mask PATTERN03: set to V RAMP (lean 1)	O	-	-	-	-	
MKSS04	Pattern mask PATTERN04: set to slant RAMP	O	-	-	-	-	
MKSS05	Pattern mask PATTERN05: Window (Hi=870, Lo=102)	O	-	-	-	-	
MKSS06	Pattern mask PATTERN06: Window (Hi=1023, Lo=102)	O	-	-	-	-	
MKSS07	Pattern mask PATTERN07: Window (Hi=1023)	O	-	-	-	-	
MKSS08	Pattern mask PATTERN08: Window (Hi=1023) 4%	O	-	-	-	-	
MKSS09	Pattern mask PATTERN09: Window (Hi=1023) 1.25%	O	-	-	-	-	
MKSS10	Pattern mask PATTERN10: Window (1/7 LINE)	O	-	-	-	-	
MKSS11	Pattern mask PATTERN11: STRIPE (MGT/GRN)	O	-	-	-	-	
MKSS12	Pattern mask PATTERN12: STRIPE (GRN/MGT)	O	-	-	-	-	
MKSS13	Pattern mask PATTERN13: Black and white checks (1 LINE)	O	-	-	-	-	
MKSS14	Pattern mask PATTERN14: Black and white checks (2 LINE)	O	-	-	-	-	
MKSS15	Pattern mask PATTERN15: Black and white checks (4 LINE)	O	-	-	-	-	
MKSS16	Pattern mask PATTERN16: Black and white checks (8 LINE)	O	-	-	-	-	
MKSS17	Pattern mask PATTERN17: COLOR BAR	O	-	-	-	-	
MKSS18	Pattern mask PATTERN18: Slanted lines	O	-	-	-	-	
MKSS19	Pattern mask PATTERN19: red and black checks (1 LINE)	O	-	-	-	-	
MKSS20	Pattern mask PATTERN20: red and black checks (2 LINE)	O	-	-	-	-	
MKSS21	Pattern mask PATTERN21: red and black checks (4 LINE)	O	-	-	-	-	
MKSS22	Pattern mask PATTERN22: red and black checks (8 LINE)	O	-	-	-	-	
MKSS23	Pattern mask PATTERN23: Residual image erase (RGB cross V inversion)	O	-	-	-	-	
MKSS24	Pattern mask PATTERN24: SUS200 (black raster)	O	-	-	-	-	
MKSS25	Pattern mask PATTERN25: Window (Hi=870, Lo=102)	O	-	-	-	-	
MKSS26	Pattern mask PATTERN26: Window (Hi=1023, Lo=102)	O	-	-	-	-	
MKSS27	Pattern mask PATTERN27: Window (Hi=1023)	O	-	-	-	-	
MKSS28	Pattern mask PATTERN28: Window (Hi=1023) 4%	O	-	-	-	-	
MKSS29	Pattern mask PATTERN29: Window (Hi=1023) 1.25%	O	-	-	-	-	
MKSS30	Pattern mask PATTERN30: Window (1/7 LINE)	O	-	-	-	-	

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
MKSS51	Raster mask RASTER01: set to white	O	-	-	-	-	
MKSS52	Raster mask RASTER02: set to red	O	-	-	-	-	
MKSS53	Raster mask RASTER03: set to green	O	-	-	-	-	
MKSS54	Raster mask RASTER04: set to blue	O	-	-	-	-	
MKSS55	Raster mask RASTER05: set to black	O	-	-	-	-	
MKSS56	Raster mask RASTER06: set to cyan	O	-	-	-	-	
MKSS57	Raster mask RASTER07: set to magenta	O	-	-	-	-	
MKSS58	Raster mask RASTER08: set to yellow	O	-	-	-	-	
MKSS59	Raster mask RASTER09: set to cyan 460: W	O	-	-	-	-	
MKSS60	Raster mask RASTER10: set to green 774: W	O	-	-	-	-	
MKSS61	Raster mask RASTER11: set to gray 912: W	O	-	-	-	-	
MKSS62	Raster mask RASTER12: set to eggshell color: W	O	-	-	-	-	
MKSS63	Raster mask RASTER13: set to pearl orange(eggshell color): W	O	-	-	-	-	
MKSS64	Raster mask RASTER14: set to sky blue: W	O	-	-	-	-	
MKSS65	Raster mask RASTER15: set to light purple: W	O	-	-	-	-	
MKSS66	Raster mask RASTER16: set to magenta: W	O	-	-	-	-	
MKSS67	Raster mask RASTER17: set to red 640	O	-	-	-	-	
MKSS68	Raster mask RASTER18:set to magenta 98	O	-	-	-	-	
MKSS69	Raster mask RASTER19: set to sky blueX1	O	-	-	-	-	
MKSS70	Raster mask RASTER20: set to sky blueX2	O	-	-	-	-	
MKSS71	Raster mask RASTER21: set to light purple X	O	-	-	-	-	
MKSS72	Raster mask RASTER22: set to blue 960	O	-	-	-	-	
MKSS73	Raster mask RASTER23: set to yellow 512	O	-	-	-	-	
MKSS74	Raster mask RASTER24: set to gray 512	O	-	-	-	-	
AM radio noise counterplan							
SFRS01	Setting AM radio noise counterplan to pattern 1	O	-	-	-	-	
SFRS02	Setting AM radio noise counterplan to pattern 2	O	-	-	-	-	
SFRS03	Setting AM radio noise counterplan to pattern 3	O	-	-	-	-	
SFRS04	Setting AM radio noise counterplan to pattern 4	O	-	-	-	-	
SFRS05	Setting AM radio noise counterplan to pattern 5	O	-	-	-	-	
SFRS06	Setting AM radio noise counterplan to pattern 6	O	-	-	-	-	
SFRS07	Setting AM radio noise counterplan to pattern 7	O	-	-	-	-	
SFRS08	Setting AM radio noise counterplan to pattern 8	O	-	-	-	-	
Serial no. setting							
SN0***	Setting 1, 2, or 3 for the serial number of the panel	O	-	-	-	-	
SN1***	Setting 4, 5, or 6 for the serial number of the panel	O	-	-	-	-	
SN2***	Setting 7, 8, or 9 for the serial number of the panel	O	-	-	-	-	
SN3***	Setting 10, 11, or 12 for the serial number of the panel	O	-	-	-	-	
SN4***	Setting 13, 14, or 15 for the serial number of the panel	O	-	-	-	-	
SN5***	Setting 1, 2, or 3 for the serial number of the unit	O	-	-	-	-	
SN6***	Setting 4, 5, or 6 for the serial number of the unit	O	-	-	-	-	
SN7***	Setting 7, 8, or 9 for the serial number of the unit	O	-	-	-	-	
SN8***	Setting 10, 11, or 12 for the serial number of the unit	O	-	-	-	-	
SN9***	Setting 13, 14, or 15 for the serial number of the unit	O	-	-	-	-	

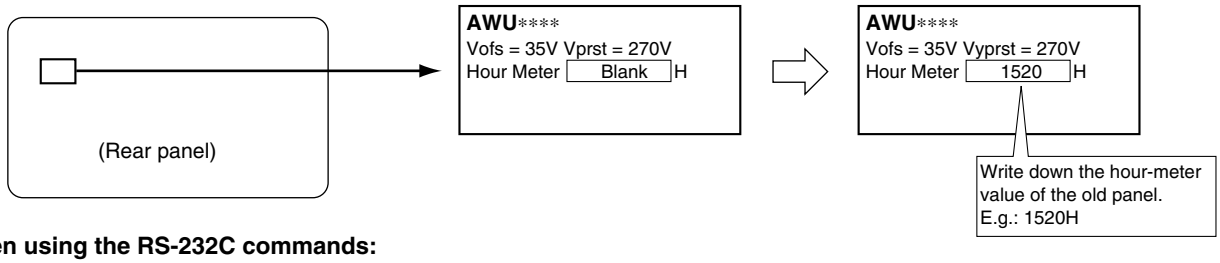
Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
Information clear / protection							
CHM	Clearing HOUR METER of the main and panel	O	-	-	-	-	
CHR	Clearing HOUR METER of the main	O	-	-	-	-	Maintains the HOUR METER of the panel
CNG	Clearing SHUT DOWN history of the main	O	-	-	-	-	
CBU	Setting the backup state of panel to no backup	O	-	-	-	-	Initialize backup ROM
CPC	Clearing the POWER ON COUNTER	O	-	-	-	-	
CPD	Clearing the POWER DOWN history	O	-	-	-	-	
CPM	Clearing the PULSE METER	O	-	-	-	-	
CSD	Clearing the SHUT DOWN history of the panel	O	-	-	-	-	
PFS	Returning to the factory shipment state	O	-	-	-	-	
ZPR	Initializing setting data without adjust command	O	-	-	-	-	
BCP	Returning the backup data to digital Assy	O	-	-	-	-	
UAJ	Returning the digital ASSY to service parts	O	-	-	-	-	
FAJ	Determining the main unit adjustment	O	-	-	-	-	
SHIS01	Setting the SHIP to S/J	O	-	-	-	-	
SHIS02	Setting the SHIP to G	O	-	-	-	-	
SHIS03	Setting the SHIP to CKD	O	-	-	-	-	
Various protection							
IJN	Turning the alarm detection off	O	-	-	-	-	Do not perform the main SHUT DOWN detection
IJY	Turning the alarm detection on	O	-	-	-	-	Perform the main SHUT DOWN detection
SDMS00	Turning the SHUT DOWN MUTE off	O	O	-	-	-	Perform the panel SHUT DOWN detection
SDMS01	Turning the SHUT DOWN MUTE on	O	O	-	-	-	Do not perform the panel SHUT DOWN detection
PPTS00	Turning the panel protection function off	O	-	-	-	-	Turn the still picture protection, panel crack protection and SCAN IC protection off
PPTS01	Turning the panel protection function on	O	-	-	-	-	Turn the still picture protection, panel crack protection and SCAN IC protection on
SDPS00	Turning the still picture protection off	O	-	-	-	-	
SDPS01	Turning the still picture protection on	O	-	-	-	-	

6.7 METHOD FOR REPLACING THE SERVICE PANEL ASSY

The following adjustments are required when the Panel Assy is replaced with that for service:

• Voltage adjustment for Vofs and Vyprst

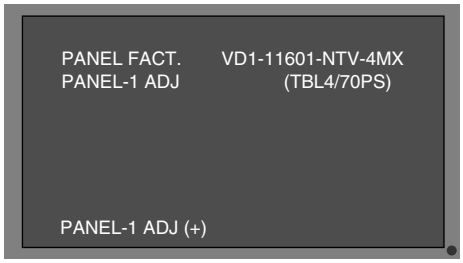
Input the reference-adjustment values for the Vofs and Vyprst voltages that are specified on the label of the panel for service.
Note: Use the RS-232C commands or Factory menu for input.

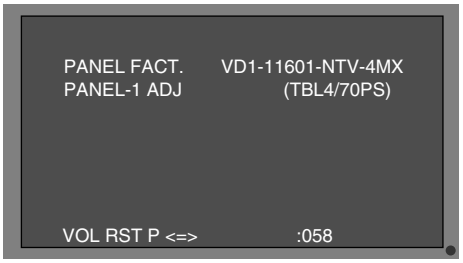


When using the RS-232C commands:
Enter Factory mode. Issue the FAY command.
Using the conversion table (see the next page,) convert the value of the adjustment voltage that is specified on the label attached on the rear panel of the unit then input the command.

- Adjustment of Vofs reference voltage: E.g.: "Vofs = 35V" → (Check the conversion table.) Input VOF112.
- Adjustment of Vprst reference voltage: E.g.: For a 50-inch panel, Vyprst = 270V → (Check the conversion table.) Input VRP055.

When using the Factory menu:





Enter Panel Factory mode, as indicated below:
Using the ▲ or ▼ key, select PANEL-1 ADJ then press the SET key to enter the next nested layer.
Select VOL-OFFSET or VOL RST P then input a numeric command value that has been converted from the voltage value, using the ◄ or ► key.

• Clearance of various logs for the panel, such as that for the hour-meter value

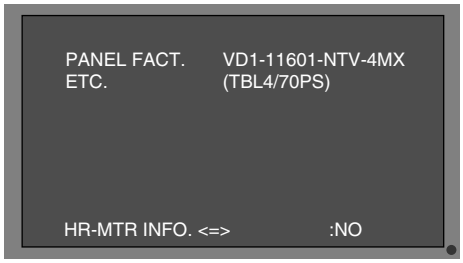
It is required to clear various data, such as the data on the hour-meter value, etc. to match the drive time of the panel. Write down the hour-meter value at the time of the replacement in the margin of the label shown above.
The shutdown (SD) and power-down (PD) logs must be cleared at the same time, because the accumulated power-on time when each SD or PD was generated is recorded in a log.

Note: For clearance of data, use the RS-232C commands or Factory menu.
There are two types of hour-meter data. Be careful NOT to clear the data for the MR hour meter.

When using the RS-232C commands:
Note: The accumulated power-on time for the product itself is acquired with the "QST" RS-232C command.
(See "6.5 Overview of the RS-232C commands.")

1. Clear the HOUR METER (panel) : CHM
2. Clear the PULSE METER : CPM
3. Clear the SD log : CSD
4. Clear the PD log : CPD

When using the Factory menu:



In Panel Factory mode, using the ▲ or ▼ key, select ETC then press the SET key.
Using the ▲ or ▼ key, select HR-MTR INFO. Using the ◄ or ► key, select CLEAR then hold the SET key pressed for 5 seconds. (The unit will automatically return to the ETC screen.)
On the ETC screen, select the items PM/B1-B5, PD INFO, and SD INFO to clear the corresponding data.

Note: The following adjustment flowchart is for currently mass-produced panels. After termination of mass-production of the product, the adjustment flowchart for the next product may be different.

Conversion charts for electronic VRs: Conversion chart for the Vofs(1/2)

Conversion chart for the Vofs (Commands vs. Common voltage values)							
Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes
VOF000	14.09	VOF045	22.50	VOF090	30.90	VOF135	39.31
VOF001	14.28	VOF046	22.68	VOF091	31.09	VOF136	39.49
VOF002	14.46	VOF047	22.87	VOF092	31.28	VOF137	39.68
VOF003	14.65	VOF048	23.06	VOF093	31.46	VOF138	39.87
VOF004	14.84	VOF049	23.24	VOF094	31.65	VOF139	40.05
VOF005	15.02	VOF050	23.43	VOF095	31.84	VOF140	40.24
VOF006	15.21	VOF051	23.62	VOF096	32.02	VOF141	40.43
VOF007	15.40	VOF052	23.80	VOF097	32.21	VOF142	40.62
VOF008	15.58	VOF053	23.99	VOF098	32.40	VOF143	40.80
VOF009	15.77	VOF054	24.18	VOF099	32.58	VOF144	40.99
VOF010	15.96	VOF055	24.36	VOF100	32.77	VOF145	41.18
VOF011	16.14	VOF056	24.55	VOF101	32.96	VOF146	41.36
VOF012	16.33	VOF057	24.74	VOF102	33.14	VOF147	41.55
VOF013	16.52	VOF058	24.92	VOF103	33.33	VOF148	41.74
VOF014	16.70	VOF059	25.11	VOF104	33.52	VOF149	41.92
VOF015	16.89	VOF060	25.30	VOF105	33.70	VOF150	42.11
VOF016	17.08	VOF061	25.48	VOF106	33.89	VOF151	42.30
VOF017	17.27	VOF062	25.67	VOF107	34.08	VOF152	42.48
VOF018	17.45	VOF063	25.86	VOF108	34.26	VOF153	42.67
VOF019	17.64	VOF064	26.04	VOF109	34.45	VOF154	42.86
VOF020	17.83	VOF065	26.23	VOF110	34.64	VOF155	43.04
VOF021	18.01	VOF066	26.42	VOF111	34.82	VOF156	43.23
VOF022	18.20	VOF067	26.61	VOF112	35.01	VOF157	43.42
VOF023	18.39	VOF068	26.79	VOF113	35.20	VOF158	43.60
VOF024	18.57	VOF069	26.98	VOF114	35.38	VOF159	43.79
VOF025	18.76	VOF070	27.17	VOF115	35.57	VOF160	43.98
VOF026	18.95	VOF071	27.35	VOF116	35.76	VOF161	44.16
VOF027	19.13	VOF072	27.54	VOF117	35.95	VOF162	44.35
VOF028	19.32	VOF073	27.73	VOF118	36.13	VOF163	44.54
VOF029	19.51	VOF074	27.91	VOF119	36.32	VOF164	44.72
VOF030	19.69	VOF075	28.10	VOF120	36.51	VOF165	44.91
VOF031	19.88	VOF076	28.29	VOF121	36.69	VOF166	45.10
VOF032	20.07	VOF077	28.47	VOF122	36.88	VOF167	45.29
VOF033	20.25	VOF078	28.66	VOF123	37.07	VOF168	45.47
VOF034	20.44	VOF079	28.85	VOF124	37.25	VOF169	45.66
VOF035	20.63	VOF080	29.03	VOF125	37.44	VOF170	45.85
VOF036	20.81	VOF081	29.22	VOF126	37.63	VOF171	46.03
VOF037	21.00	VOF082	29.41	VOF127	37.81	VOF172	46.22
VOF038	21.19	VOF083	29.59	VOF128	38.00	VOF173	46.41
VOF039	21.37	VOF084	29.78	VOF129	38.19	VOF174	46.59
VOF040	21.56	VOF085	29.97	VOF130	38.37	VOF175	46.78
VOF041	21.75	VOF086	30.15	VOF131	38.56	VOF176	46.97
VOF042	21.94	VOF087	30.34	VOF132	38.75	VOF177	47.15
VOF043	22.12	VOF088	30.53	VOF133	38.93	VOF178	47.34
VOF044	22.31	VOF089	30.71	VOF134	39.12	VOF179	47.53

Conversion charts for electronic VRs: Conversion chart for the Vofs(2/2)

Conversion chart for the Vofs (Commands vs. Common voltage values)			
Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes
VOF180	47.71	VOF225	56.12
VOF181	47.90	VOF226	56.31
VOF182	48.09	VOF227	56.49
VOF183	48.27	VOF228	56.68
VOF184	48.46	VOF229	56.87
VOF185	48.65	VOF230	57.05
VOF186	48.83	VOF231	57.24
VOF187	49.02	VOF232	57.43
VOF188	49.21	VOF233	57.61
VOF189	49.39	VOF234	57.80
VOF190	49.58	VOF235	57.99
VOF191	49.77	VOF236	58.17
VOF192	49.96	VOF237	58.36
VOF193	50.14	VOF238	58.55
VOF194	50.33	VOF239	58.73
VOF195	50.52	VOF240	58.92
VOF196	50.70	VOF241	59.11
VOF197	50.89	VOF242	59.30
VOF198	51.08	VOF243	59.48
VOF199	51.26	VOF244	59.67
VOF200	51.45	VOF245	59.86
VOF201	51.64	VOF246	60.04
VOF202	51.82	VOF247	60.23
VOF203	52.01	VOF248	60.42
VOF204	52.20	VOF249	60.60
VOF205	52.38	VOF250	60.79
VOF206	52.57	VOF251	60.98
VOF207	52.76	VOF252	61.16
VOF208	52.94	VOF253	61.35
VOF209	53.13	VOF254	61.54
VOF210	53.32	VOF255	61.72
VOF211	53.50		
VOF212	53.69		
VOF213	53.88		
VOF214	54.06		
VOF215	54.25		
VOF216	54.44		
VOF217	54.63		
VOF218	54.81		
VOF219	55.00		
VOF220	55.19		
VOF221	55.37		
VOF222	55.56		
VOF223	55.75		
VOF224	55.93		

Conversion charts for electronic VRs: Conversion chart for the Vprst (1/2)

Conversion chart for the Vprst (Commands vs. Voltage values)							
Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes
VRP000	236.3	VRP045	255.8	VRP090	275.4	VRP135	294.9
VRP001	236.7	VRP046	256.3	VRP091	275.8	VRP136	295.3
VRP002	237.1	VRP047	256.7	VRP092	276.2	VRP137	295.8
VRP003	237.6	VRP048	257.1	VRP093	276.7	VRP138	296.2
VRP004	238.0	VRP049	257.6	VRP094	277.1	VRP139	296.7
VRP005	238.4	VRP050	258.0	VRP095	277.5	VRP140	297.1
VRP006	238.9	VRP051	258.4	VRP096	278.0	VRP141	297.5
VRP007	239.3	VRP052	258.9	VRP097	278.4	VRP142	298.0
VRP008	239.7	VRP053	259.3	VRP098	278.8	VRP143	298.4
VRP009	240.2	VRP054	259.7	VRP099	279.3	VRP144	298.8
VRP010	240.6	VRP055	260.2	VRP100	279.7	VRP145	299.3
VRP011	241.0	VRP056	260.6	VRP101	280.1	VRP146	299.7
VRP012	241.5	VRP057	261.0	VRP102	280.6	VRP147	300.1
VRP013	241.9	VRP058	261.5	VRP103	281.0	VRP148	300.6
VRP014	242.4	VRP059	261.9	VRP104	281.4	VRP149	301.0
VRP015	242.8	VRP060	262.3	VRP105	281.9	VRP150	301.4
VRP016	243.2	VRP061	262.8	VRP106	282.3	VRP151	301.9
VRP017	243.7	VRP062	263.2	VRP107	282.8	VRP152	302.3
VRP018	244.1	VRP063	263.6	VRP108	283.2	VRP153	302.7
VRP019	244.5	VRP064	264.1	VRP109	283.6	VRP154	303.2
VRP020	245.0	VRP065	264.5	VRP110	284.1	VRP155	303.6
VRP021	245.4	VRP066	264.9	VRP111	284.5	VRP156	304.0
VRP022	245.8	VRP067	265.4	VRP112	284.9	VRP157	304.5
VRP023	246.3	VRP068	265.8	VRP113	285.4	VRP158	304.9
VRP024	246.7	VRP069	266.2	VRP114	285.8	VRP159	305.3
VRP025	247.1	VRP070	266.7	VRP115	286.2	VRP160	305.8
VRP026	247.6	VRP071	267.1	VRP116	286.7	VRP161	306.2
VRP027	248.0	VRP072	267.5	VRP117	287.1	VRP162	306.6
VRP028	248.4	VRP073	268.0	VRP118	287.5	VRP163	307.1
VRP029	248.9	VRP074	268.4	VRP119	288.0	VRP164	307.5
VRP030	249.3	VRP075	268.9	VRP120	288.4	VRP165	307.9
VRP031	249.7	VRP076	269.3	VRP121	288.8	VRP166	308.4
VRP032	250.2	VRP077	269.7	VRP122	289.3	VRP167	308.8
VRP033	250.6	VRP078	270.2	VRP123	289.7	VRP168	309.2
VRP034	251.0	VRP079	270.6	VRP124	290.1	VRP169	309.7
VRP035	251.5	VRP080	271.0	VRP125	290.6	VRP170	310.1
VRP036	251.9	VRP081	271.5	VRP126	291.0	VRP171	310.6
VRP037	252.3	VRP082	271.9	VRP127	291.4	VRP172	311.0
VRP038	252.8	VRP083	272.3	VRP128	291.9	VRP173	311.4
VRP039	253.2	VRP084	272.8	VRP129	292.3	VRP174	311.9
VRP040	253.6	VRP085	273.2	VRP130	292.7	VRP175	312.3
VRP041	254.1	VRP086	273.6	VRP131	293.2	VRP176	312.7
VRP042	254.5	VRP087	274.1	VRP132	293.6	VRP177	313.2
VRP043	254.9	VRP088	274.5	VRP133	294.0	VRP178	313.6
VRP044	255.4	VRP089	274.9	VRP134	294.5	VRP179	314.0

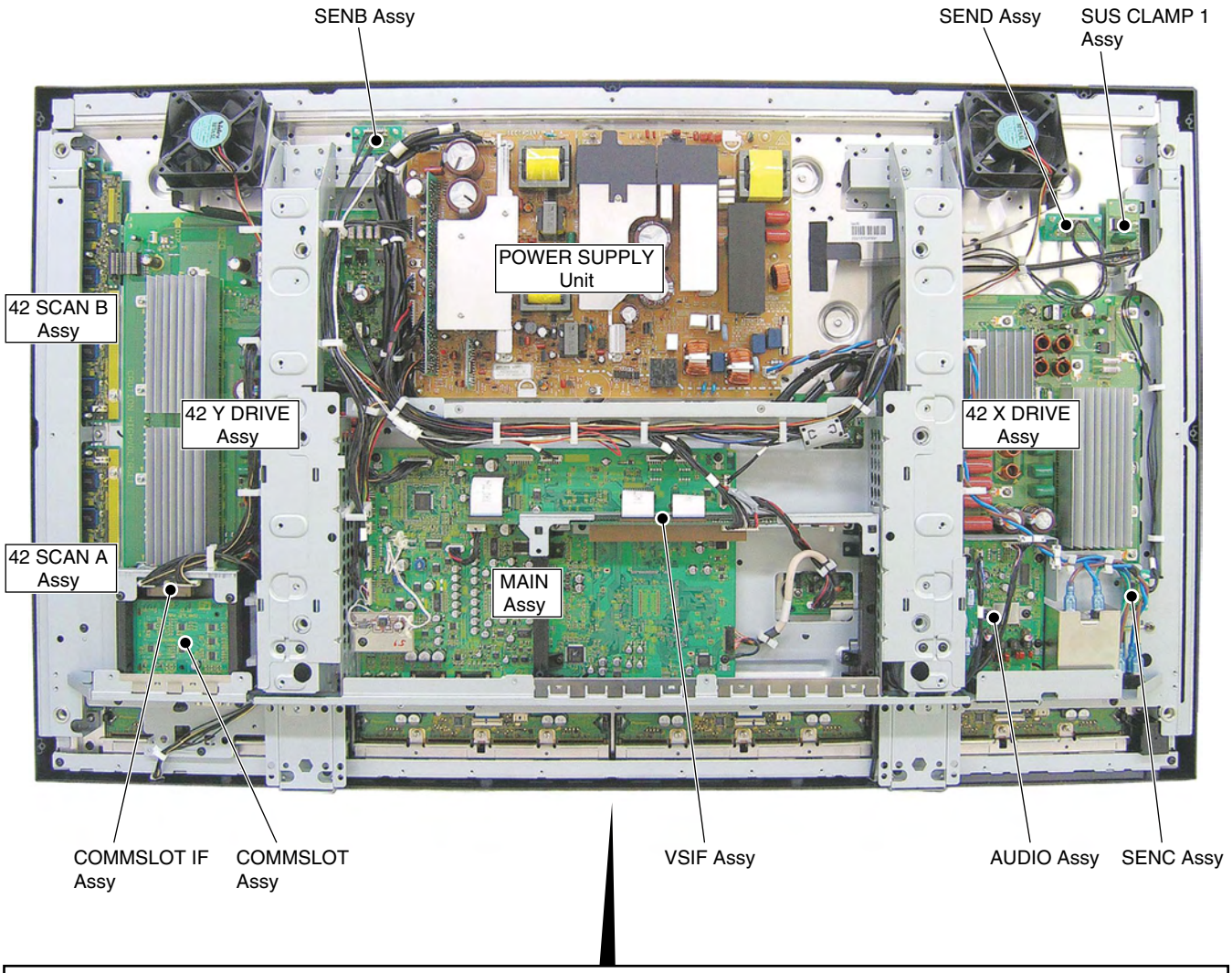
Conversion charts for electronic VRs: Conversion chart for the Vprst (2/2)

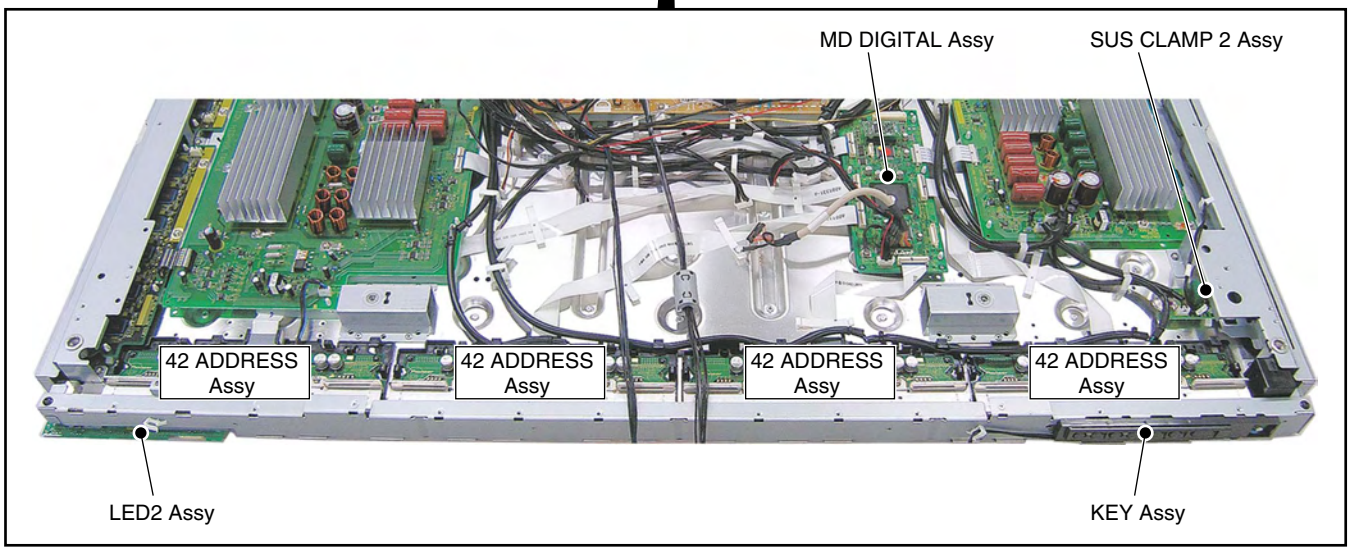
Conversion chart for the Vprst (Commands vs. Voltage values)			
Command	Voltage value [V] for common sizes	Command	Voltage value [V] for common sizes
VRP180	314.5	VRP225	334.0
VRP181	314.9	VRP226	334.4
VRP182	315.3	VRP227	334.9
VRP183	315.8	VRP228	335.3
VRP184	316.2	VRP229	335.7
VRP185	316.6	VRP230	336.2
VRP186	317.1	VRP231	336.6
VRP187	317.5	VRP232	337.1
VRP188	317.9	VRP233	337.5
VRP189	318.4	VRP234	337.9
VRP190	318.8	VRP235	338.4
VRP191	319.2	VRP236	338.8
VRP192	319.7	VRP237	339.2
VRP193	320.1	VRP238	339.7
VRP194	320.5	VRP239	340.1
VRP195	321.0	VRP240	340.5
VRP196	321.4	VRP241	341.0
VRP197	321.8	VRP242	341.4
VRP198	322.3	VRP243	341.8
VRP199	322.7	VRP244	342.3
VRP200	323.2	VRP245	342.7
VRP201	323.6	VRP246	343.1
VRP202	324.0	VRP247	343.6
VRP203	324.5	VRP248	344.0
VRP204	324.9	VRP249	344.4
VRP205	325.3	VRP250	344.9
VRP206	325.8	VRP251	345.3
VRP207	326.2	VRP252	345.7
VRP208	326.6	VRP253	346.2
VRP209	327.1	VRP254	346.6
VRP210	327.5	VRP255	347.0
VRP211	327.9		
VRP212	328.4		
VRP213	328.8		
VRP214	329.2		
VRP215	329.7		
VRP216	330.1		
VRP217	330.5		
VRP218	331.0		
VRP219	331.4		
VRP220	331.8		
VRP221	332.3		
VRP222	332.7		
VRP223	333.1		
VRP224	333.6		

7. GENERAL INFORMATION

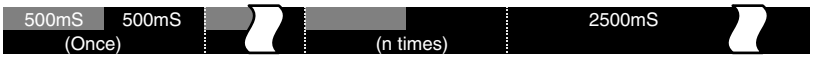
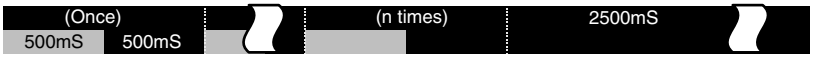
7.1 DIAGNOSIS

7.1.1 PCB LOCATION





7.1.2 DIAGNOSIS OF SHUTDOWN/POWER-DOWN INDICATED BY LEDS

Status	LED Lighting Pattern			Remarks
Power on (while the indicators are off)	Green: Not lit, Red: Not lit	Red		
		Green		
Power on (while the indicators are on)	Green: Lit	Red		
		Green		
Standby	Red: Lit	Red		
		Green		
Power management	Green flashes at intervals of 1000 ms	Red		
		Green		
Power-down	Red flashes at intervals of 500 ms for 1 to n times *1 in one burst, with 2500 ms of pause between switching.	Red		
		Green		
Shutdown	Green flashes at intervals of 500 ms for 1 to n times *2 in one burst, with 2500 ms of pause between switching.	Red		
		Green		
No backup copy (panel)	Red lit, and green flashes at intervals of 200 ms	Red		*3
		Green		

*1 For the frequency of flashing during power-down, see the "PD" sheet.
*2 For the frequency of flashing during shut down, see the "SD" sheet.
*3 Only the LEDs on the DIGITAL Assy of MD flash.

Red: Lit
Green: Lit
Not lit

Triggered by an REQ_MD signal, a QS2 command is issued to acquire data on the status of the MD.

- After the control program refers to power-down (PD) data echoed back, when a power-down is found to have been generated, the red LED flashes the number of times specified by the PD data in a burst.
- If a power-down is found in either of the 1st or 2nd set of PD data, the PD data that contain generated power-down data are referred to.
- If power-downs are found in both the 1st and 2nd set of PD data, the 1st set of PD data is referred to, and the 2nd set of PD data is ignored.

Cause for PD	Flashing Frequency	Color	LED Display Pattern
PD information="1" (Not used at present, but the LED flashes one time in a burst if "1" is echoed back.)	1	Red	
PD information="2" POWER	2	Red	
PD information="3" SCAN	3	Red	
PD information="4" SCN-5V	4	Red	
PD information="5" Y-DRV	5	Red	
PD information="6" Y-DCDC	6	Red	
PD information="7" Y-SUS	7	Red	
PD information="8" ADRS	8	Red	
PD information="9" X-DRV	9	Red	
PD information="A" X-DCDC	10	Red	
PD information="B" X-SUS	11	Red	
PD information="C" (Not used at present, but the LED flashes 12 times in a burst if "C" is echoed back.)	12	Red	
PD information="D" SQ-IC	13	Red	
PD information="E" (Not used at present, but the LED flashes 14 times in a burst if "E" is echoed back.)	14	Red	
PD information="F" or except for the above	15	Red	

How to cancel an alarm
If power is shut off in response to a shutdown (SD) or power-down signal, turn the main power off, or unplug the power cord then reconnect it. After making sure that the red LED goes dark, turn the main power back on.

Red: Lit
Not lit

• Diagnosis of the Power-down

Frequency of Flashing of Red LED	PD Operation	Defective Board Assy	Reason for Power-down	Point to be Checked	Possible Defective Parts	Remarks
2	POWER	POWER SUPPLY				
3	SCAN	SCAN A, B	VH UVP	SCAN IC	SCAN IC	Short-circuiting between VH and GNDH
		Y DRIVE		Y SUS BLOCK	IC2252, IC2253	Short-circuiting between VSUS and SUSOUT or SUSOUT and SUSGND
				VH DC/DC	IC2502, L2501	
			Detection of connector disconnection	CN2001, CN2350		
		X DRIVE	VH UVP	IC1202	C1202	Short-circuiting between VSUS and SUSOUT or SUSOUT and SUSGND
4	SCN-5V	SCAN A, B	Detection of connector disconnection	CN2401, CN2402		
			IC5V UVP	SCAN IC	SCAN IC	
		Y DRIVE		IC5V DC/DC	Q2605, R2647	
				Y SUS BLOCK	R2352	
6	Y-DCDC	Y DRIVE	VOFS UVP	VOFS DC/DC	Q2606, R2619, R2620	
				Y SUS BLOCK	IC2252, IC2253, Q2280, Q2281	Short-circuiting between MSKS and SUSOUT
			Vprst UVP	Vprst Regulator	Q2531, Q2532, IC2535	
7	Y-SUS	Y DRIVE	Detection of midpoint voltage PD	Y RESONANCE BLOCK	IC2101	
				Y SUS BLOCK	Q2221	
8	ADRS	ADDRESS	Address PD	ADDRESS RESONANCE BLOCK	D1634	Short-circuiting between V+ADR and GND_ADR
			Detection of connector disconnection	CN1501, CN3501-CN3504		
9	XDRIVE	X DRIVE	Detection of connector disconnection	CN1001		
10	X-DCDC	X DRIVE	Detection of connector disconnection	CN1201		
			VRN UVP	VRN DC/DC	Q1323, R1332, R1333	
				X SUS BLOCK	R1204, Q1272	
11	X-SUS	X DRIVE	Detection of midpoint voltage PD	X RESONANCE BLOCK	IC1101	

*** When the Power-down is occured as the key-lock is effective.**

- Please pull out the AC-plug, and make the state to stand-by mode.
- The lock is cancelled when the key-lock button is pressed for 5 seconds.

Triggered by an REQ_MD signal, a QS2 command is issued to acquire data on the status of the MD.

- After the control program refers to the main shutdown (SD) data echoed back, when a shutdown is found to have been generated, the green LED flashes the number of times (1-4) specified by the main MD SD data in a burst.
- If a shutdown is generated on the main unit side, the green LED flashes the number of specified times (5-15) in a burst, as shown in the table below.
- If a shutdown is generated on the MD and main unit sides, MD SD data take priority.

Reason for SD	Flashing Frequency	Color	LED Display Pattern	Remarks
MD SD information Main="1" SQ-IC	1	Green	Repeat	The LED flashes according to SD data from the MD.
MD SD information Main="2" MDU-IIC	2	Green	Repeat	The LED flashes according to SD data from the MD.
MD SD information Main="3" RST2	3	Green	Repeat	The LED flashes according to SD data from the MD.
MD SD information Main="4" Panel high temeprature	4	Green	Repeat	The LED flashes according to SD data from the MD.
Short circuit of speaker	5	Green	Repeat	
Failure in module microcomputer communications	6	Green	Repeat	
Failure in main microcomputer IIC communications EEPROM (main control), EEPROM (VIDEO SLOT), IC1(VIDEO SLOT), A/D-PLL, IC6, AUDIO CONTROL IC, Extension I/O2	8	Green	Repeat	*1
Not used	9	Green	Repeat	
FAN stopped	10	Green	Repeat	
Abnormal temperature	11	Green	Repeat	Temperature sensor high temperature *1
Not used	12	Green	Repeat	
Abnormal power supply voltage	13	Green	Repeat	Power supply voltage 3.3V detection
Not used	14	Green	Repeat	
VCC-DOWN1 detection VCC-DOWN2 detection	15	Green	Repeat	*1

*1: Detailed information can be obtained by issuing an RS-232C command (QNG).

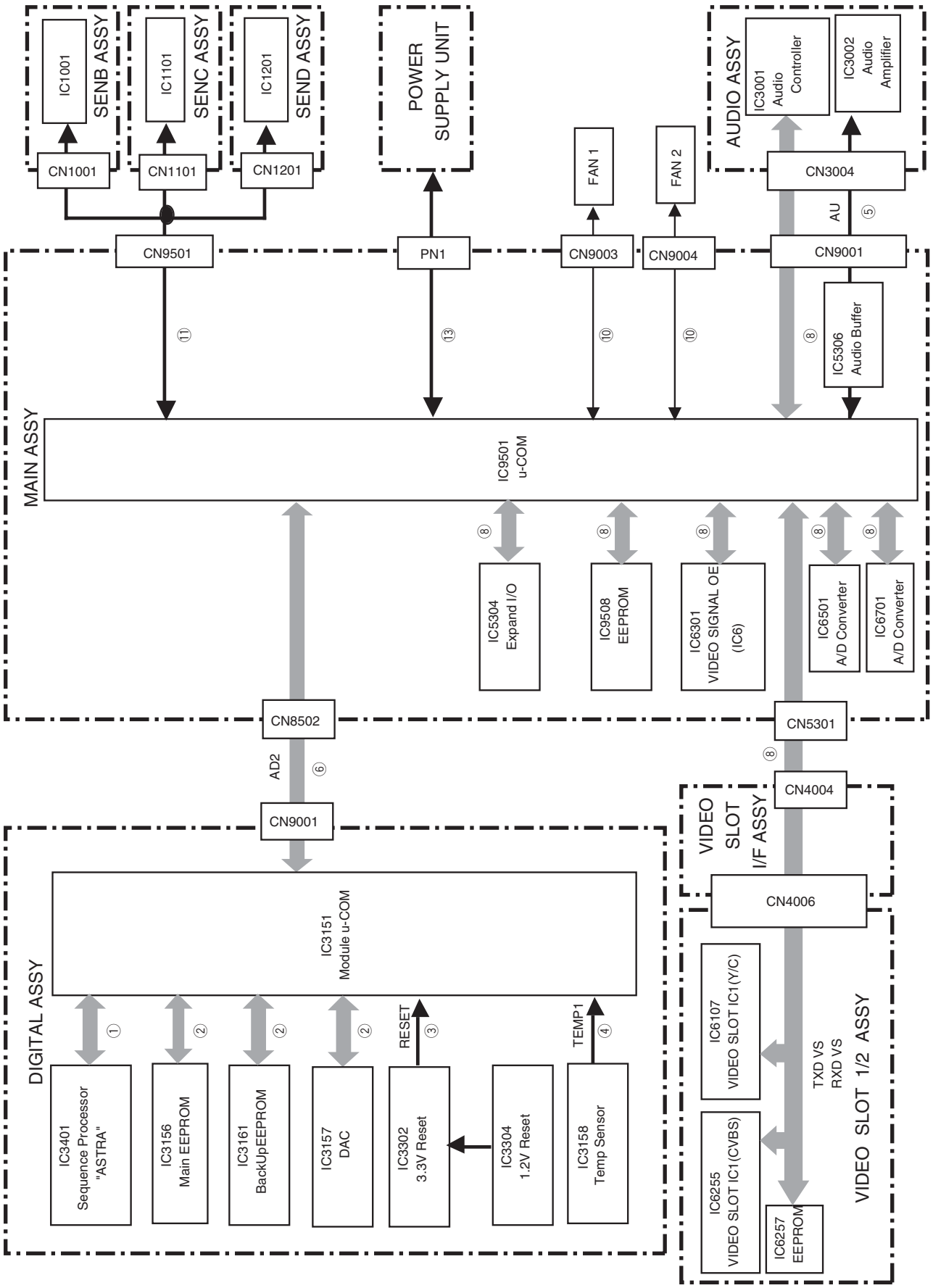
Green: Lit Not lit

How to cancel an alarm
If power is shut off in response to a shutdown (SD) or power-down signal, turn the main power off, or unplug the power cord then reconnect it.
After making sure that the red LED goes dark, turn the main power back on.

• Diagnosis of the shutdown

Frequency of Flashing of Green LED	Shutdown Operation	Defective Assy	Reason for Shutdown	Point to be Checked	Possible Defective Part	Remarks
1	Communication failure in panel drive IC	DIGITAL	Failure in panel drive IC or defective peripheral circuits	SQ ASIC BLOCK, PANEL FLASH BLOCK	IC3401,IC3151	
		DIGITAL	Writing failure of panel drive IC		IC3401,IC3151	After turning the unit on again, check if the data on the version can be read with the QS1 command.
2	IIC communication failure of the module (Check the shutdown subcategory on the Factory menu.)	DIGITAL	Communication failure in EEPROM (4k) or defective peripheral circuits	MODULE UCOM BLOCK	IC3156	
		DIGITAL	Failure in the DAC IC or defective peripheral circuits	MODULE UCOM BLOCK	IC3157	
		DIGITAL	Communication failure in EEPROM (2k) or defective peripheral circuits	OB AUDIO	IC3161	
		DIGITAL	Failure in Temp Sensor IC or defective peripheral circuits	OB AUDIO	IC3158	
3	Abnormality in RST2	DIGITAL	Defective DC-DC converter	DIGITAL DD CON BLOCK	U3601, IC3401	Check if 3.3V and 1.2V are activated. (not short-circuited) No 8-V power input to the DC/DC converter. A defective IC3401 may be the cause.
		DIGITAL	Failure in the RST IC	PANEL FLASH BLOCK	IC3302,IC3304	
		POWER SUPPLY	12V power not booted	POWER SUPPLY		
4	Panel having higher temperature	PANEL SENSOR	Failure in thermister or defective peripheral circuits	Temperature sensor	IC3158,IC3151	If this pattern of flashing occurs even when the panel temperature has not clearly reached the specified one, possible causes are a defective IC3158 temperature sensor, defective soldering of IC3158, broken TEMP1 signal line, and defective soldering between IC3158 and IC3151.
			Panel having higher temperature	Surrounding temperature		Sensor temperature ≧75°C (TEMP1)
5	Audio failure		Speaker short-circuited	Speaker terminals		Check if the speaker cables are in contact with the chassis, etc.
		AUDIO	Defective AMP IC		IC3002	
		AUDIO	Defective AUDIO CONTROL IC		IC3001	
		MAIN	Defective buffer		IC5306	
		AUDIO	Disconnection of connector	CN9001-CN3004		Check if the connector is disconnected or not securely connected.
6	Communication failure in module microcomputer	DIGITAL	Communication failure of the module microcomputer or defective peripheral circuits	MODULE UCOM BLOCK	IC3151	Check if the communication lines (TXD0/RXD0) are shorted or opened.
			Failure in writing in the module microcomputer	MODULE UCOM BLOCK	IC3151	
			Disconnection of connector	CN9001-CN8502		Check if the connector is disconnected or not securely connected.
7	Not used					
8	IIC communication failure	MAIN	Communication failure of EEPROM		IC9508	
		VIDEO SLOT 1 or 2	Communication failure of VIDEO SLOT IC1 (CVBS)	IC1 (Y/C) BLOCK	IC6255	
		VIDEO SLOT 1 or 2	Communication failure of VIDEO SLOT IC1 (Y/C)	IC1 (CVBS) BLOCK	IC6107	
		MAIN	Communication failure of A/D Main (A system)		IC6501	
		MAIN	Communication failure of A/D Sub (Bsystem)		IC6701	
		MAIN	Communication failure of IC6		IC6301	
		VIDEO SLOT 1 or 2	Communication failure of VIDEO SLOT EEPROM		IC6257	
		AUDIO	Communication failure of AUDIO CONTROL IC		IC3001	
		MAIN	Communication failure of extension I/O2		IC5304	
9	Not used					
10	Fan failure	FAN	Failure in the fan motor or fan stopped by attached dust.			
			Disconnection of connector	CN9003, CN9004, FAN wires (FA,FB) relay part		Check if the connector is disconnected or not securely connected.
11	Unit having higher temperature	SENB, SENC, SEND	Use in high temperature environment	Surrounding temperature		Sensor temperature is a high temperature
		SENB, SENC, SEND	Defective the sensor IC	Temperature sensor	IC1001, IC1101, IC1201	
			Disconnection of connector	CN1001, CN1101, CN1201, CN9501, wires		Check if the connector is disconnected or not securely connected.
12	Not used					
13	Failure of the power supply voltage	POWER SUPPLY	Power failure	Pins 1 to 3 of PN1	POWER SUPPLY	Check if 3.3V is activated. (not short-circuited)
14	Not used					
15	Others		Failure of 12V line circuit			Check the short-circuit point of 12V line circuit.
			Failure of 13.5V and 6.5V line circuits			Check the short-circuit points of 13.5V and 6.5V line circuits.

SHUTDOWN BLOCK DIAGRAM



7.1.3 TROUBLESHOOTING

- In a case of a power-supply-related abnormality, such as no power and LEDs' flashing or lighting as an alarm indication:
  Proceed to "1. Abnormality in power supply" (P138).

- In a case of an image-related abnormality, such as no image on the screen:
  Proceed to "2. Abnormality in images" (P140).

- In a case of no video loop output (in a model for industrial use):
  This is caused by a failure in the MAIN PWB.

- In a case of an audio-related abnormality, such as no sound:
  Proceed to "3. Abnormality in audio" (P148).

- In a case when a remote control unit does not function:
  Proceed to "4. Failure of a remote control unit" (P152).

Note:
- If symptoms persist after replacement of parts, such as ICs, following the diagnosis results of this failure-analysis chart, it is recommended to replace the whole PC board, as short-circuiting or breaking of printed wiring of board patterns is suspected.
- In this failure-analysis chart, a connector is expressed either by its circuit number (CN****) or by its name.
  The correspondence of a circuit number to a connector name is shown in the table below:

(E.g.: SW connector on the MAIN_PWB is CN9011)

Circuit No.								Connector Name
MAIN_PWB	KEY_PWB	COMM_SLOT_IF	SENB_PWB	SENC_PWB	SEND_PWB	LED_PWB	AUDIO_PWB	
CN9011	CN2201	–	–	–	–	–	–	SW
CN9010	–	CN2302	–	–	–	–	–	–
CN9501	–	–	–	–	–	–	–	TM
–	–	–	CN1001	–	–	–	–	TM1
–	–	–	–	CN1101	–	–	–	TM2
–	–	–	–	–	CN1201	–	–	TM3
–	–	CN2301	–	–	–	CN2401	–	–
CN9008	–	–	–	–	–	–	–	PV
CN9003	–	–	–	–	–	–	–	FA
CN9004	–	–	–	–	–	–	–	FB
CN9006	–	–	–	–	–	–	–	PM
CN9007	–	–	–	–	–	–	–	PN1
CN9012	–	–	–	–	–	–	–	PN2
CN8501	–	–	–	–	–	–	–	AD1
CN8502	–	–	–	–	–	–	–	AD2
CN9001	–	–	–	–	–	–	CN3004	AU

*** When the Power-down is occured as the key-lock is effective.**
- Please pull out the AC-plug, and make the state to stand-by mode.
- The lock is cancelled when the key-lock button is pressed for 5 seconds.

A

B

C

D

E

F

SIDE A

A

B

C

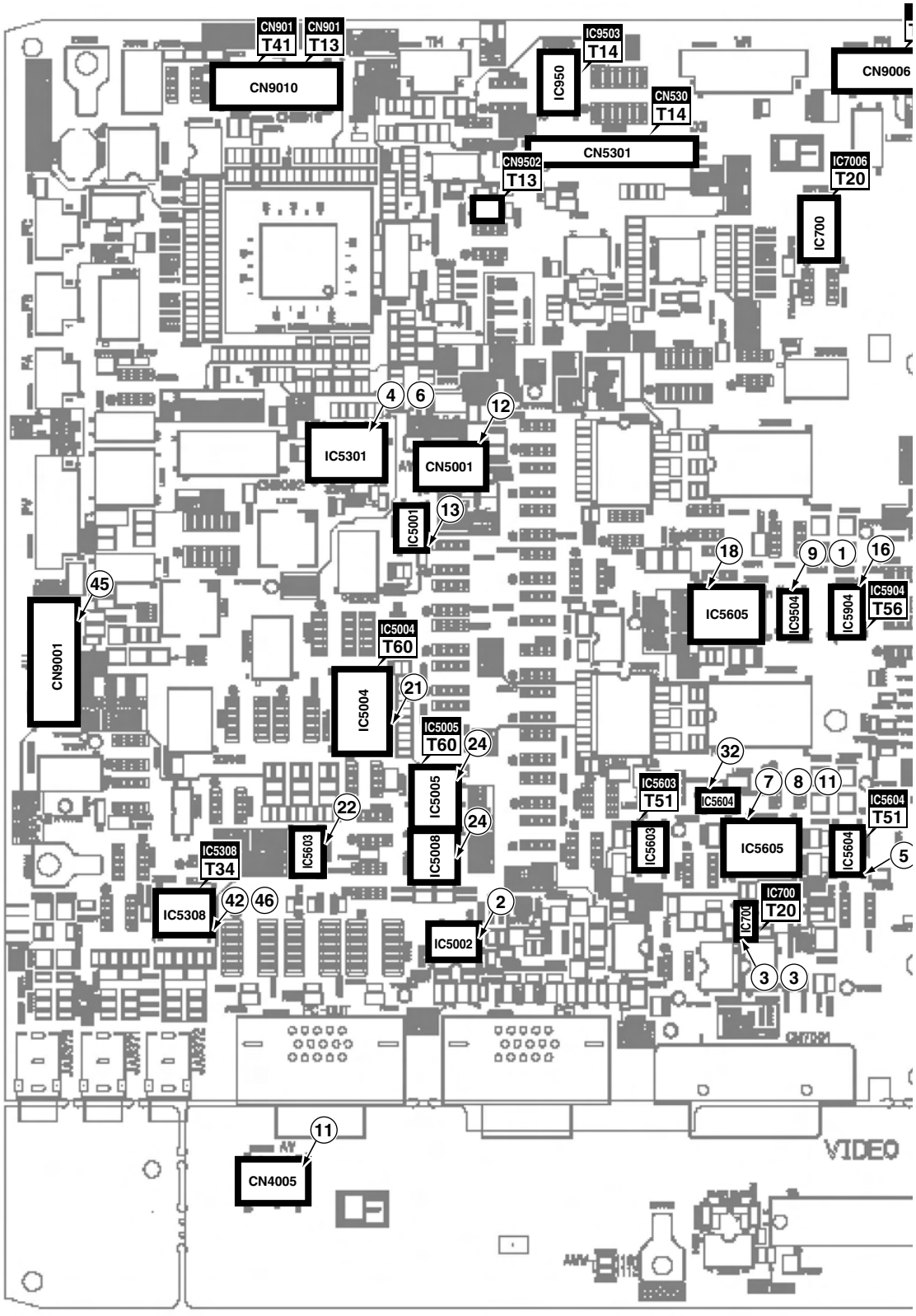
D

E

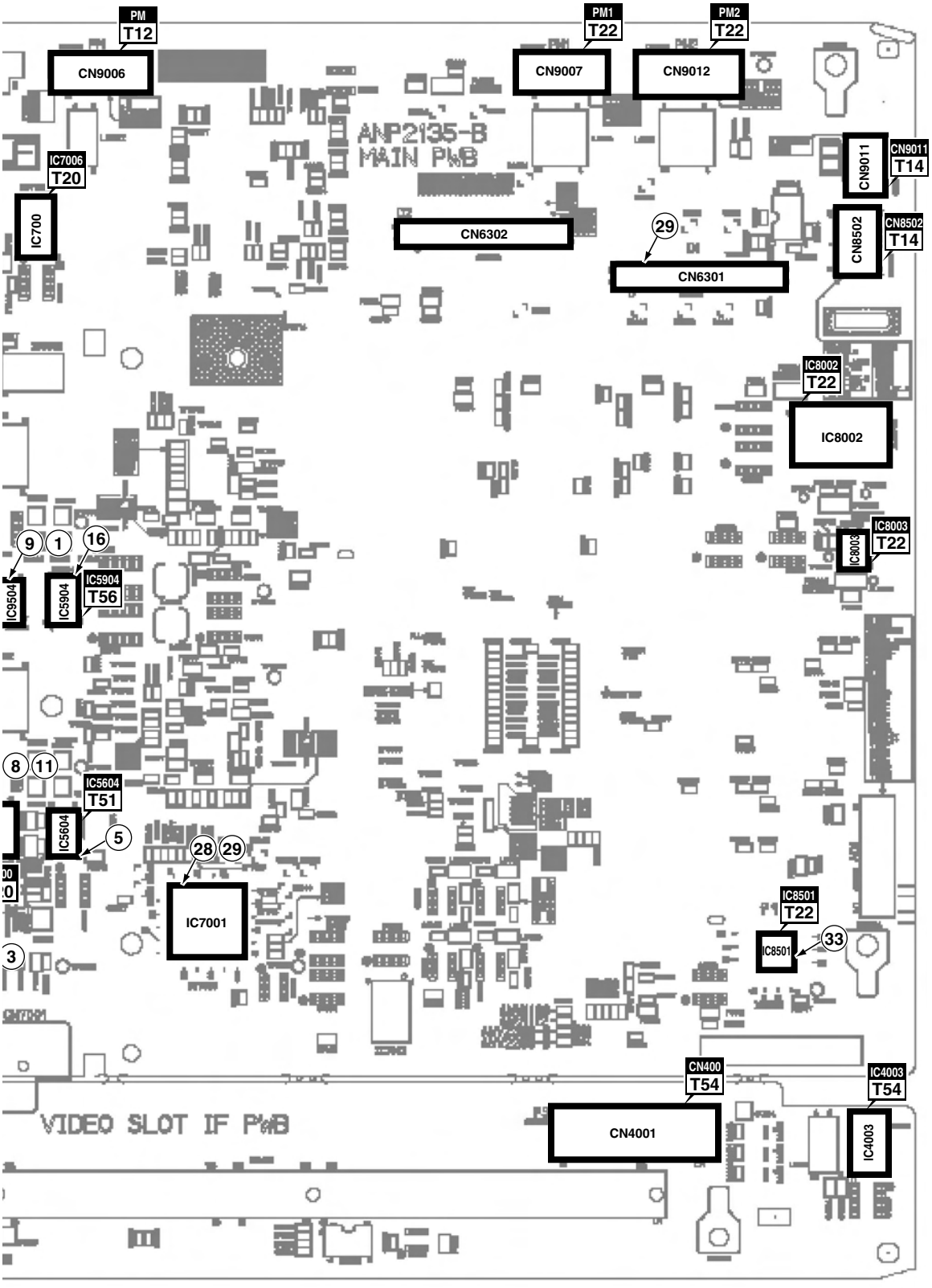
F

• CONNECTOR/WAVE FORM POINT

MAIN PWB



SIDE A


PM
T12
CN9006
PM1
T22
CN9007
PM2
T22
CN9012
ANP2135-B
MAIN PWB
IC7006
T20
IC700
CN6302
29
CN6301
CN9011
T14
CN9011
CN8502
T14
CN8502
IC8002
T22
IC8002
IC8003
T22
IC8003
9
1
16
IC5904
T56
IC5904
IC9504
8
11
IC5604
T51
IC5604
5
28
29
IC7001
IC8501
T22
IC8501
33
3
CN400
T54
CN4001
IC4003
T54
IC4003
VIDEO SLOT IF PWB

SIDE B

A

B

C

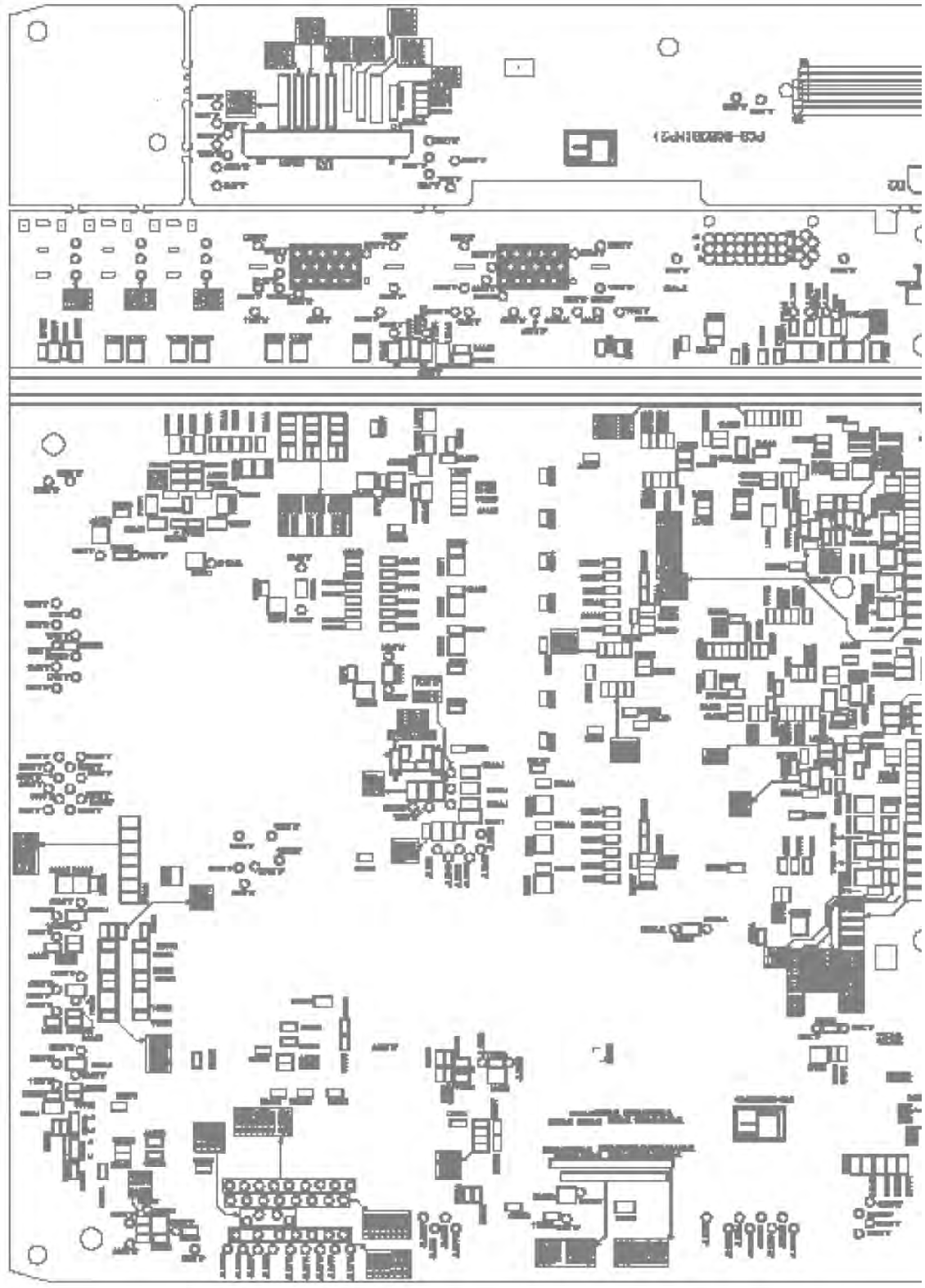
D

E

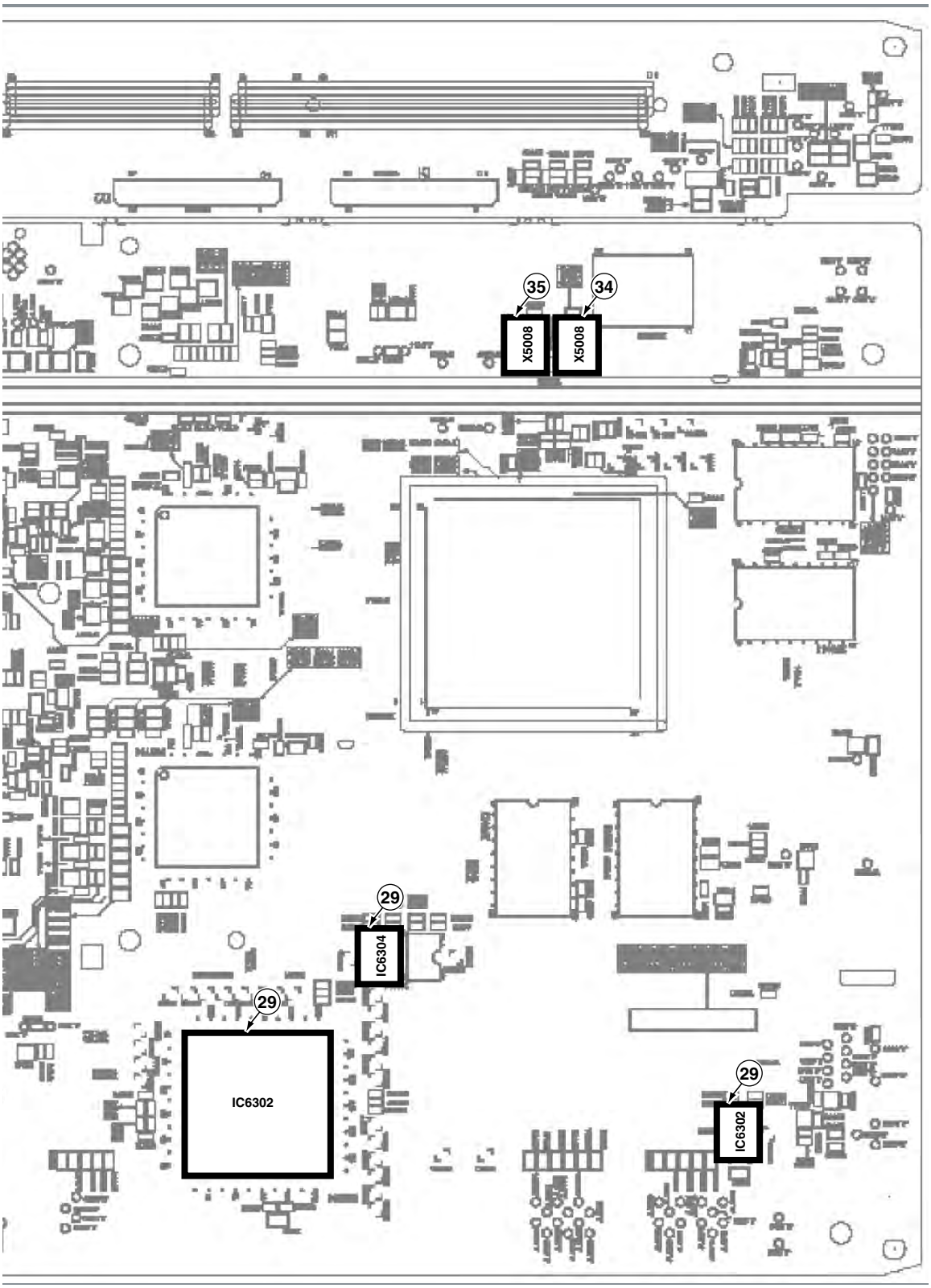
F

• CONNECTOR/WAVE FORM POINT

MAIN PWB



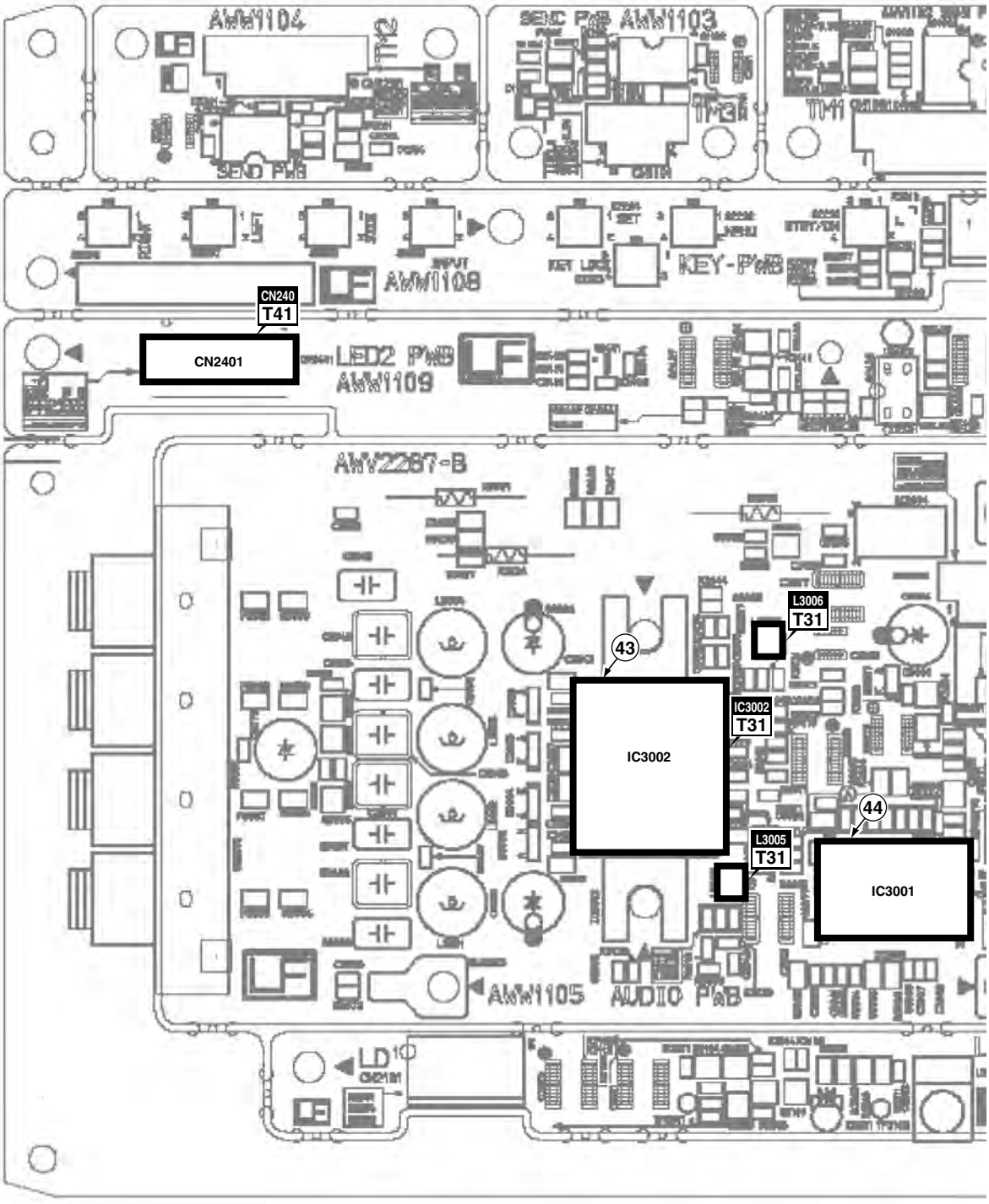
SIDE B



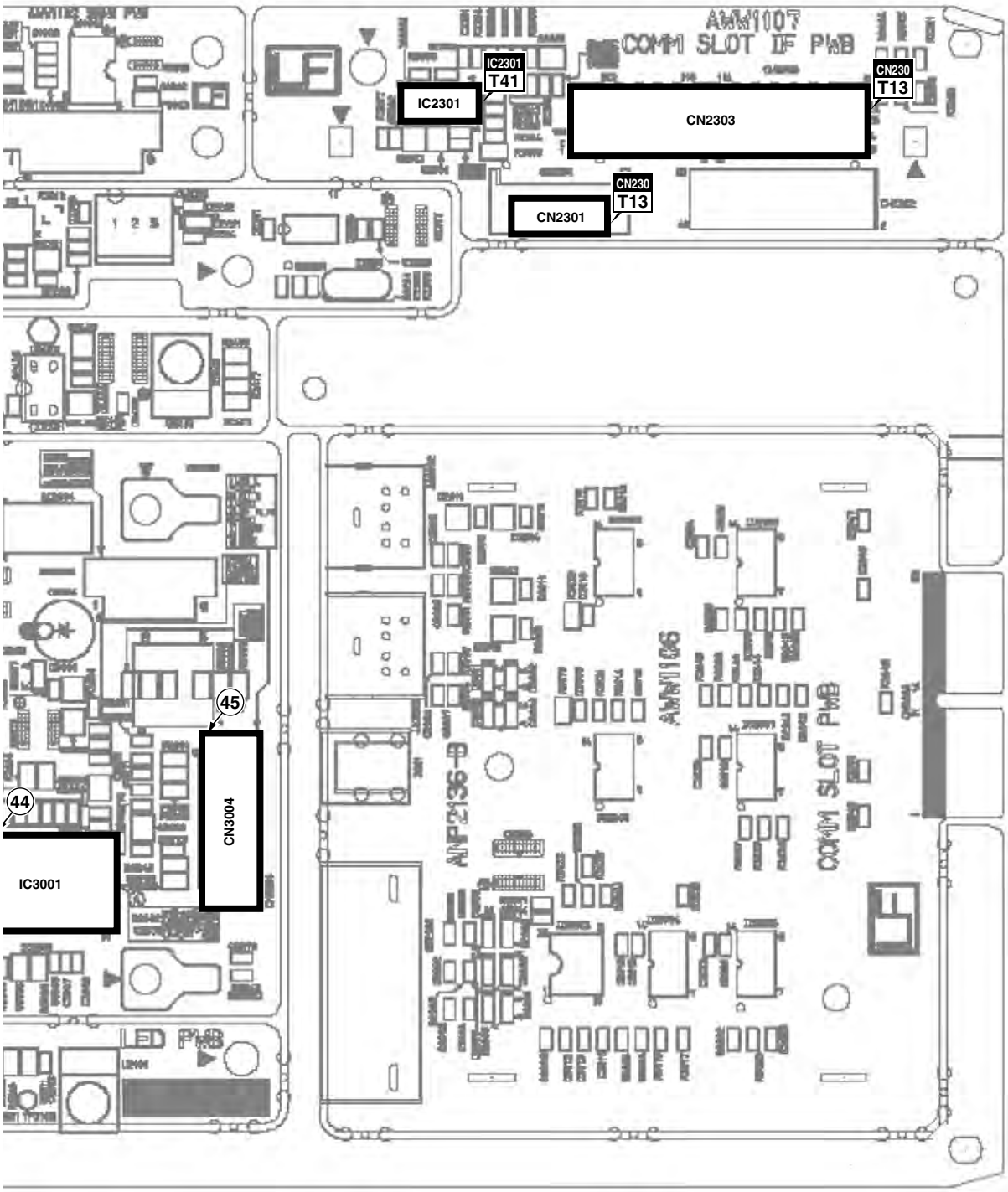
SIDE A

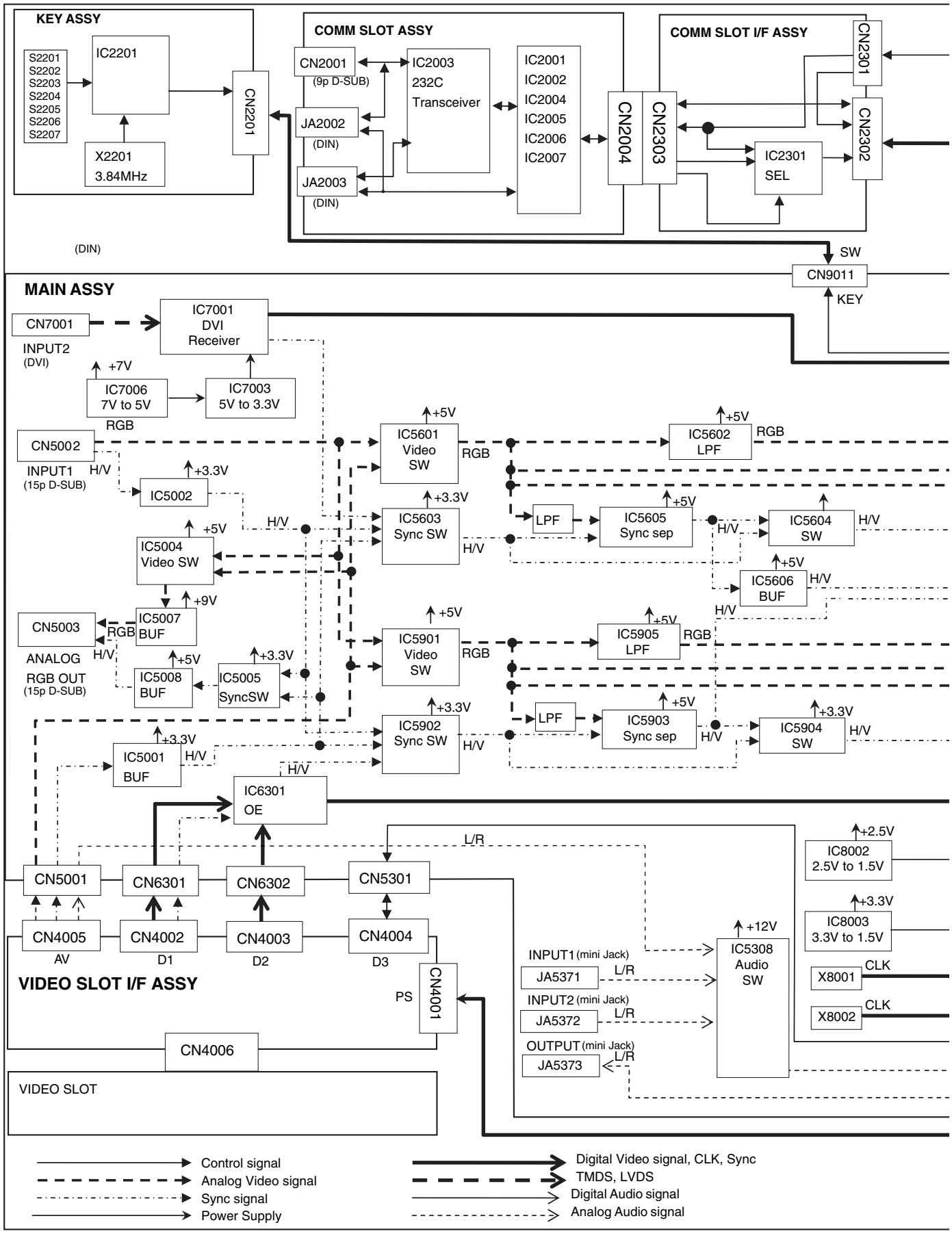
• CONNECTOR/WAVE FORM POINT

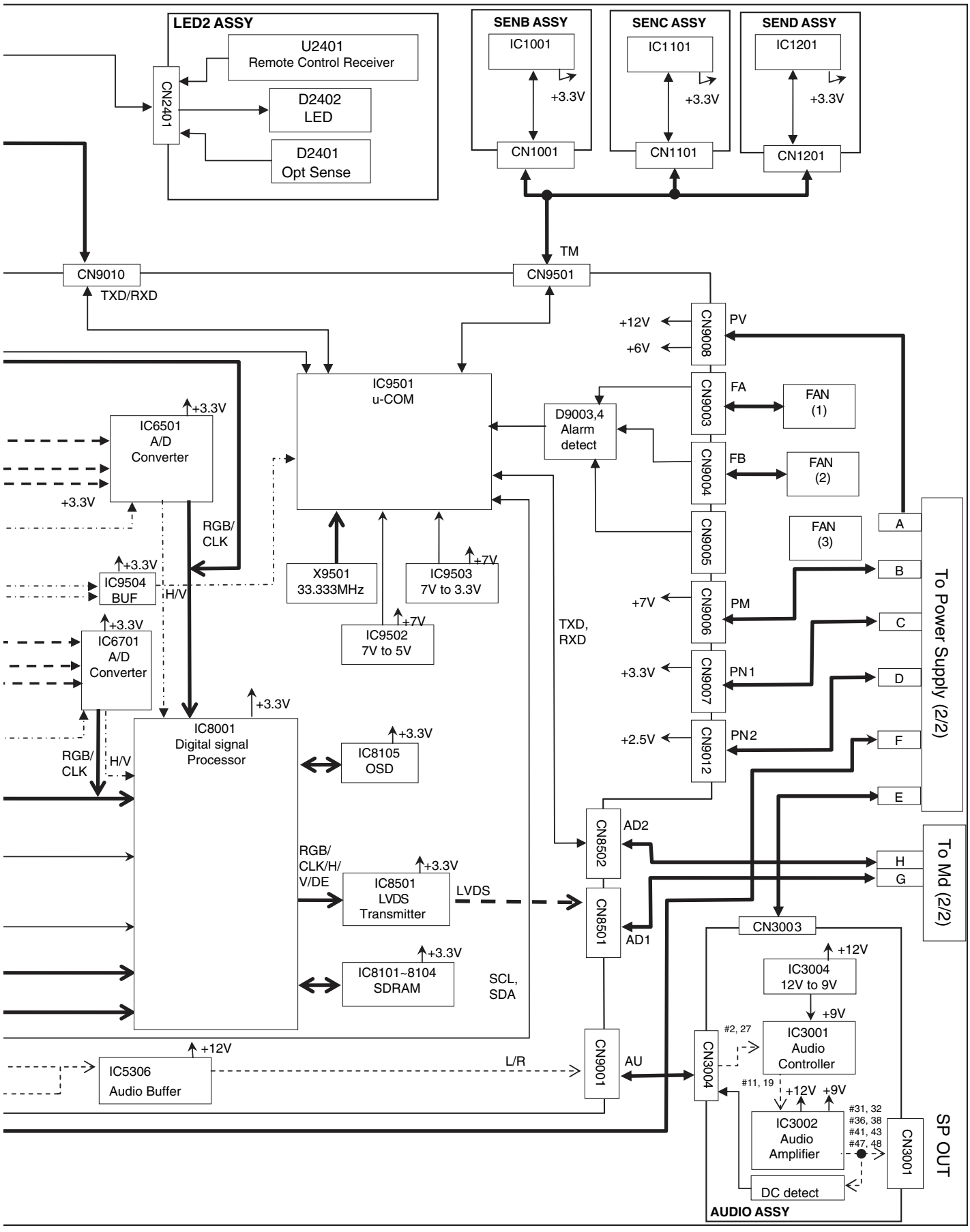
SUB PWB



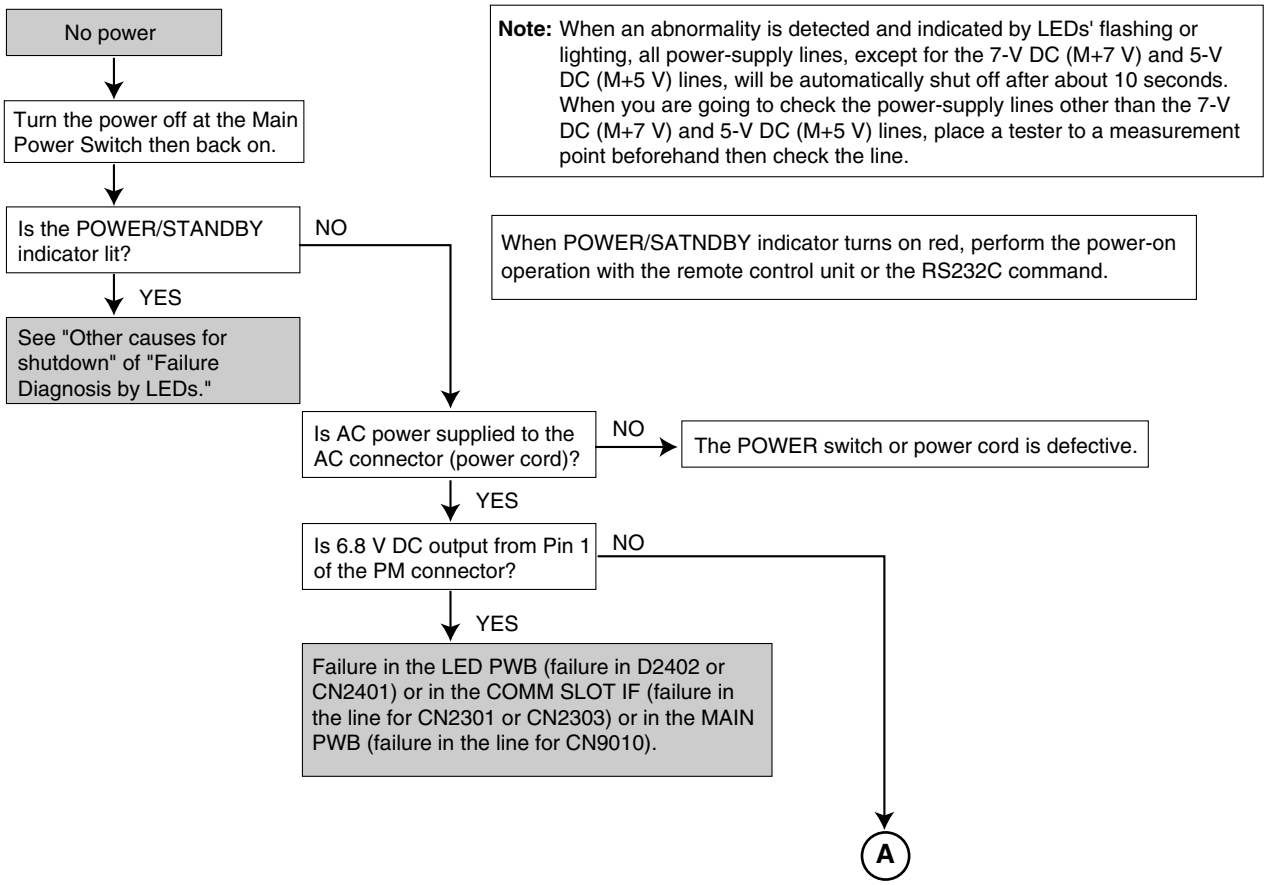
SIDE A

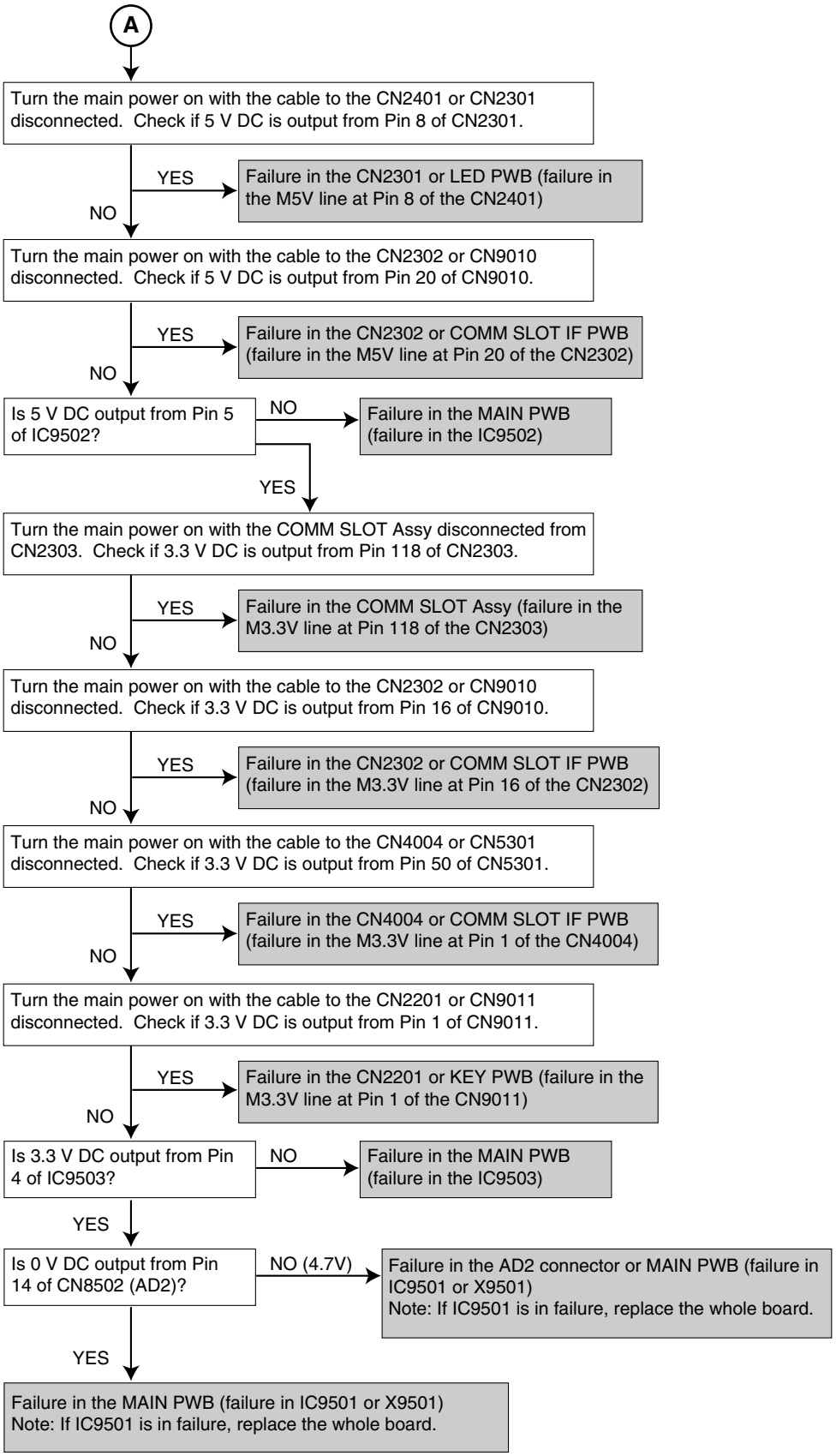

AMM1107
COMM SLOT IF PWB
IC2301
T41
IC2301
CN230
T13
CN2303
CN230
T13
CN2301
45
44
CN3004
IC3001
LED PWB
ANP2136-B
AMM1106
COMM SLOT PWB


KEY ASSY
S2201
S2202
S2203
S2204
S2205
S2206
S2207
IC2201
X2201
3.84MHz
CN2201
COMM SLOT ASSY
CN2001
(9p D-SUB)
JA2002
(DIN)
JA2003
(DIN)
IC2003
232C
Transceiver
IC2001
IC2002
IC2004
IC2005
IC2006
IC2007
CN2004
CN2303
COMM SLOT I/F ASSY
CN2301
CN2302
IC2301
SEL
(DIN)
SW
CN9011
KEY
MAIN ASSY
CN7001
INPUT2
(DVI)
IC7001
DVI
Receiver
+7V
IC7006
7V to 5V
IC7003
5V to 3.3V
RGB
CN5002
INPUT1
(15p D-SUB)
H/V
IC5002
+3.3V
IC5601
Video
SW
+5V
RGB
IC5602
LPF
IC5603
Sync SW
IC5004
Video SW
IC5605
Sync sep
IC5604
SW
IC5606
BUF
IC5007
BUF
+9V
CN5003
ANALOG
RGB OUT
(15p D-SUB)
IC5008
BUF
IC5005
SyncSW
IC5901
Video
SW
IC5905
LPF
IC5902
Sync SW
LPF
IC5903
Sync sep
IC5904
SW
IC5001
BUF
IC6301
OE
L/R
CN5001
CN6301
CN6302
CN5301
CN4005
CN4002
CN4003
CN4004
AV
D1
D2
D3
VIDEO SLOT I/F ASSY
PS
CN4001
CN4006
VIDEO SLOT
IC8002
2.5V to 1.5V
+2.5V
IC8003
3.3V to 1.5V
+3.3V
X8001
X8002
CLK
IC5308
Audio
SW
+12V
INPUT1 (mini Jack)
JA5371
INPUT2 (mini Jack)
JA5372
OUTPUT (mini Jack)
JA5373
Control signal
Analog Video signal
Sync signal
Power Supply
Digital Video signal, CLK, Sync
TMDS, LVDS
Digital Audio signal
Analog Audio signal


LED2 ASSY
U2401
Remote Control Receiver
CN2401
D2402
LED
D2401
Opt Sense
SENB ASSY
IC1001
+3.3V
CN1001
SENC ASSY
IC1101
+3.3V
CN1101
SEND ASSY
IC1201
+3.3V
CN1201
TM
CN9010
TXD/RXD
CN9501
IC9501
u-COM
+12V
+6V
CN9008
PV
CN9003
FA
FAN
(1)
CN9004
FB
FAN
(2)
CN9005
FAN
(3)
D9003,4
Alarm
detect
+3.3V
IC6501
A/D
Converter
+3.3V
RGB/
CLK
+3.3V
IC9504
BUF
H/V
X9501
33.333MHz
+7V
IC9503
7V to 3.3V
+7V
IC9502
7V to 5V
TXD,
RXD
+7V
CN9006
PM
+3.3V
CN9007
PN1
+2.5V
CN9012
PN2
A
B
C
D
F
E
To Power Supply (2/2)
+3.3V
IC6701
A/D
Converter
RGB/
CLK
H/V
+3.3V
IC8001
Digital signal
Processor
+3.3V
IC8105
OSD
CN8502
AD2
H
G
To Md (2/2)
RGB/
CLK/H/
V/DE
+3.3V
IC8501
LVDS
Transmitter
LVDS
CN8501
AD1
CN3003
+12V
IC3004
12V to 9V
+9V
+3.3V
IC8101~8104
SDRAM
SCL,
SDA
#2, 27
IC3001
Audio
Controller
+12V
IC5306
Audio Buffer
L/R
CN9001
AU
CN3004
#11, 19
+12V
+9V
#31, 32
#36, 38
#41, 43
#47, 48
IC3002
Audio
Amplifier
CN3001
SP OUT
DC detect
AUDIO ASSY

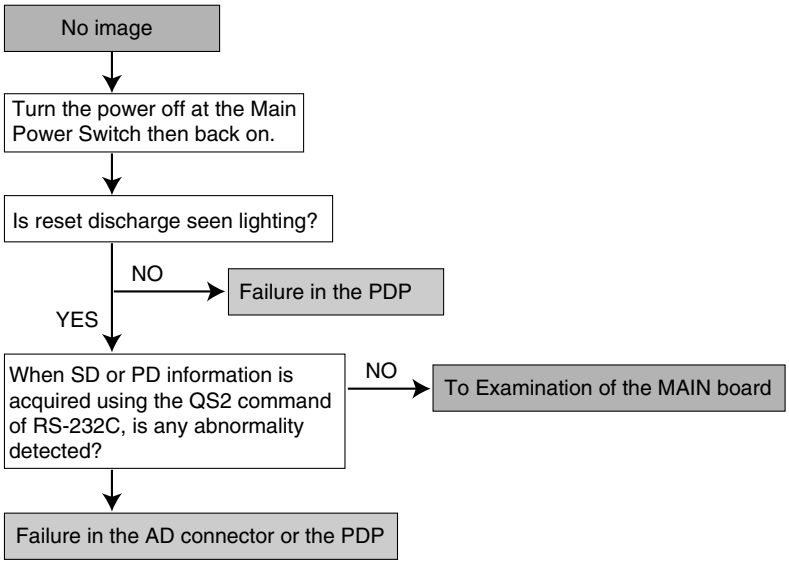
1. Abnormality in power supply


No power
Turn the power off at the Main Power Switch then back on.
Is the POWER/STANDBY indicator lit?
NO
YES
See "Other causes for shutdown" of "Failure Diagnosis by LEDs."
Is AC power supplied to the AC connector (power cord)?
NO
The POWER switch or power cord is defective.
YES
Is 6.8 V DC output from Pin 1 of the PM connector?
NO
YES
Failure in the LED PWB (failure in D2402 or CN2401) or in the COMM SLOT IF (failure in the line for CN2301 or CN2303) or in the MAIN PWB (failure in the line for CN9010).
A
Note: When an abnormality is detected and indicated by LEDs' flashing or lighting, all power-supply lines, except for the 7-V DC (M+7 V) and 5-V DC (M+5 V) lines, will be automatically shut off after about 10 seconds. When you are going to check the power-supply lines other than the 7-V DC (M+7 V) and 5-V DC (M+5 V) lines, place a tester to a measurement point beforehand then check the line.
When POWER/SATNDBY indicator turns on red, perform the power-on operation with the remote control unit or the RS232C command.


A
Turn the main power on with the cable to the CN2401 or CN2301 disconnected. Check if 5 V DC is output from Pin 8 of CN2301.
YES
Failure in the CN2301 or LED PWB (failure in the M5V line at Pin 8 of the CN2401)
NO
Turn the main power on with the cable to the CN2302 or CN9010 disconnected. Check if 5 V DC is output from Pin 20 of CN9010.
YES
Failure in the CN2302 or COMM SLOT IF PWB (failure in the M5V line at Pin 20 of the CN2302)
NO
Is 5 V DC output from Pin 5 of IC9502?
NO
Failure in the MAIN PWB (failure in the IC9502)
YES
Turn the main power on with the COMM SLOT Assy disconnected from CN2303. Check if 3.3 V DC is output from Pin 118 of CN2303.
YES
Failure in the COMM SLOT Assy (failure in the M3.3V line at Pin 118 of the CN2303)
NO
Turn the main power on with the cable to the CN2302 or CN9010 disconnected. Check if 3.3 V DC is output from Pin 16 of CN9010.
YES
Failure in the CN2302 or COMM SLOT IF PWB (failure in the M3.3V line at Pin 16 of the CN2302)
NO
Turn the main power on with the cable to the CN4004 or CN5301 disconnected. Check if 3.3 V DC is output from Pin 50 of CN5301.
YES
Failure in the CN4004 or COMM SLOT IF PWB (failure in the M3.3V line at Pin 1 of the CN4004)
NO
Turn the main power on with the cable to the CN2201 or CN9011 disconnected. Check if 3.3 V DC is output from Pin 1 of CN9011.
YES
Failure in the CN2201 or KEY PWB (failure in the M3.3V line at Pin 1 of the CN9011)
NO
Is 3.3 V DC output from Pin 4 of IC9503?
NO
Failure in the MAIN PWB (failure in the IC9503)
YES
Is 0 V DC output from Pin 14 of CN8502 (AD2)?
NO (4.7V)
Failure in the AD2 connector or MAIN PWB (failure in IC9501 or X9501)
Note: If IC9501 is in failure, replace the whole board.
YES
Failure in the MAIN PWB (failure in IC9501 or X9501)
Note: If IC9501 is in failure, replace the whole board.

2. Abnormality in images

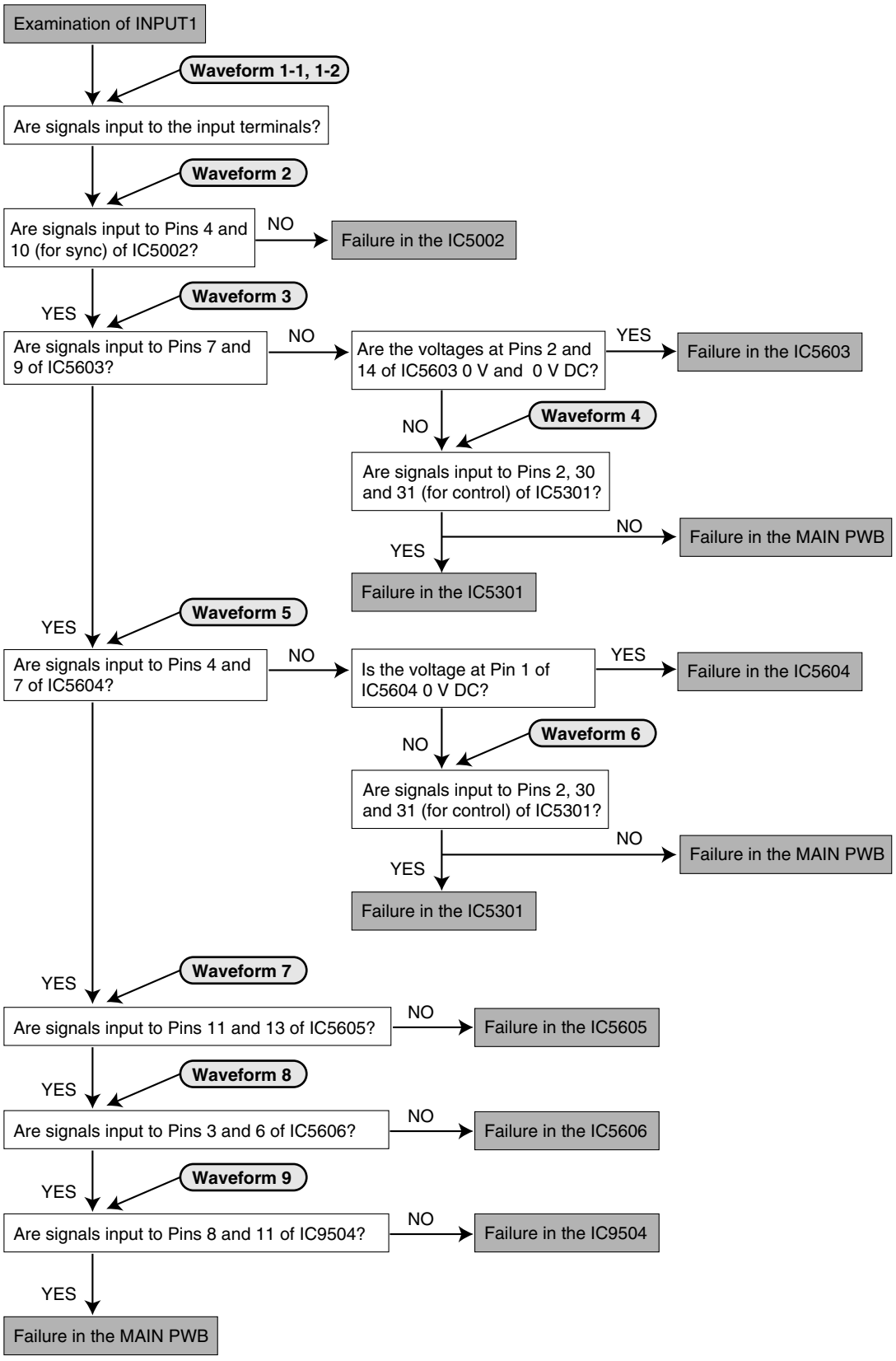
No image


No image
Turn the power off at the Main Power Switch then back on.
Is reset discharge seen lighting?
NO
Failure in the PDP
YES
When SD or PD information is acquired using the QS2 command of RS-232C, is any abnormality detected?
NO
To Examination of the MAIN board
Failure in the AD connector or the PDP

Examination of the MAIN board

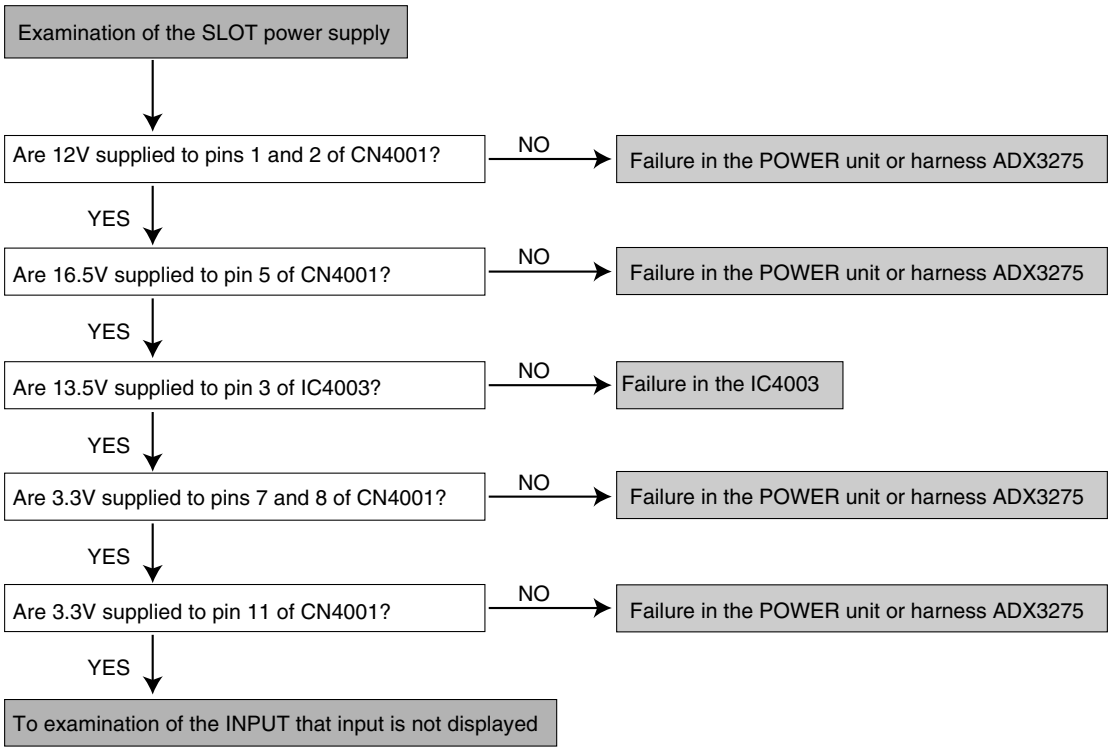
No image

In a case of input to INPUT1


Examination of INPUT1
Waveform 1-1, 1-2
Are signals input to the input terminals?
Waveform 2
Are signals input to Pins 4 and 10 (for sync) of IC5002?
NO
Failure in the IC5002
YES
Waveform 3
Are signals input to Pins 7 and 9 of IC5603?
NO
Are the voltages at Pins 2 and 14 of IC5603 0 V and 0 V DC?
YES
Failure in the IC5603
NO
Waveform 4
Are signals input to Pins 2, 30 and 31 (for control) of IC5301?
NO
Failure in the MAIN PWB
YES
Failure in the IC5301
YES
Waveform 5
Are signals input to Pins 4 and 7 of IC5604?
NO
Is the voltage at Pin 1 of IC5604 0 V DC?
YES
Failure in the IC5604
NO
Waveform 6
Are signals input to Pins 2, 30 and 31 (for control) of IC5301?
NO
Failure in the MAIN PWB
YES
Failure in the IC5301
YES
Waveform 7
Are signals input to Pins 11 and 13 of IC5605?
NO
Failure in the IC5605
YES
Waveform 8
Are signals input to Pins 3 and 6 of IC5606?
NO
Failure in the IC5606
YES
Waveform 9
Are signals input to Pins 8 and 11 of IC9504?
NO
Failure in the IC9504
YES
Failure in the MAIN PWB

Examination of the SLOT

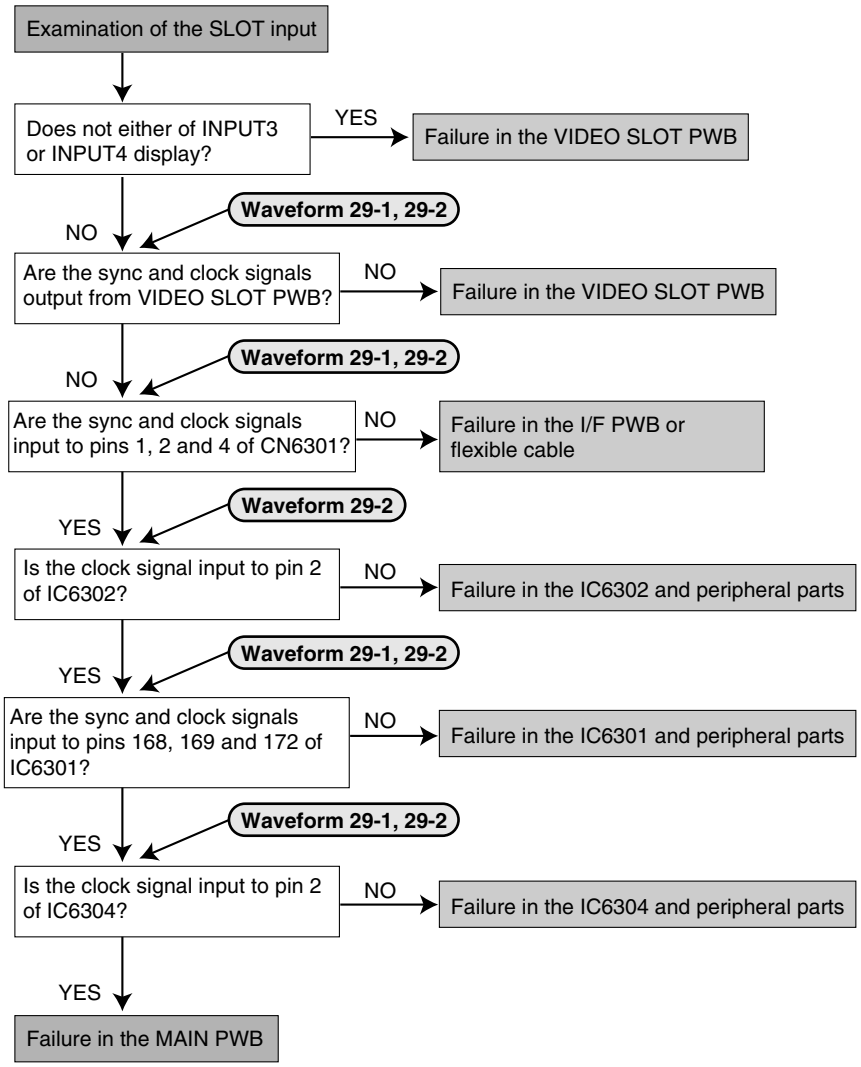
When either input from SLOT does not come out


Examination of the SLOT power supply
Are 12V supplied to pins 1 and 2 of CN4001?
NO
Failure in the POWER unit or harness ADX3275
YES
Are 16.5V supplied to pin 5 of CN4001?
NO
Failure in the POWER unit or harness ADX3275
YES
Are 13.5V supplied to pin 3 of IC4003?
NO
Failure in the IC4003
YES
Are 3.3V supplied to pins 7 and 8 of CN4001?
NO
Failure in the POWER unit or harness ADX3275
YES
Are 3.3V supplied to pin 11 of CN4001?
NO
Failure in the POWER unit or harness ADX3275
YES
To examination of the INPUT that input is not displayed

In a case of SLOT input (analog signal)

No image

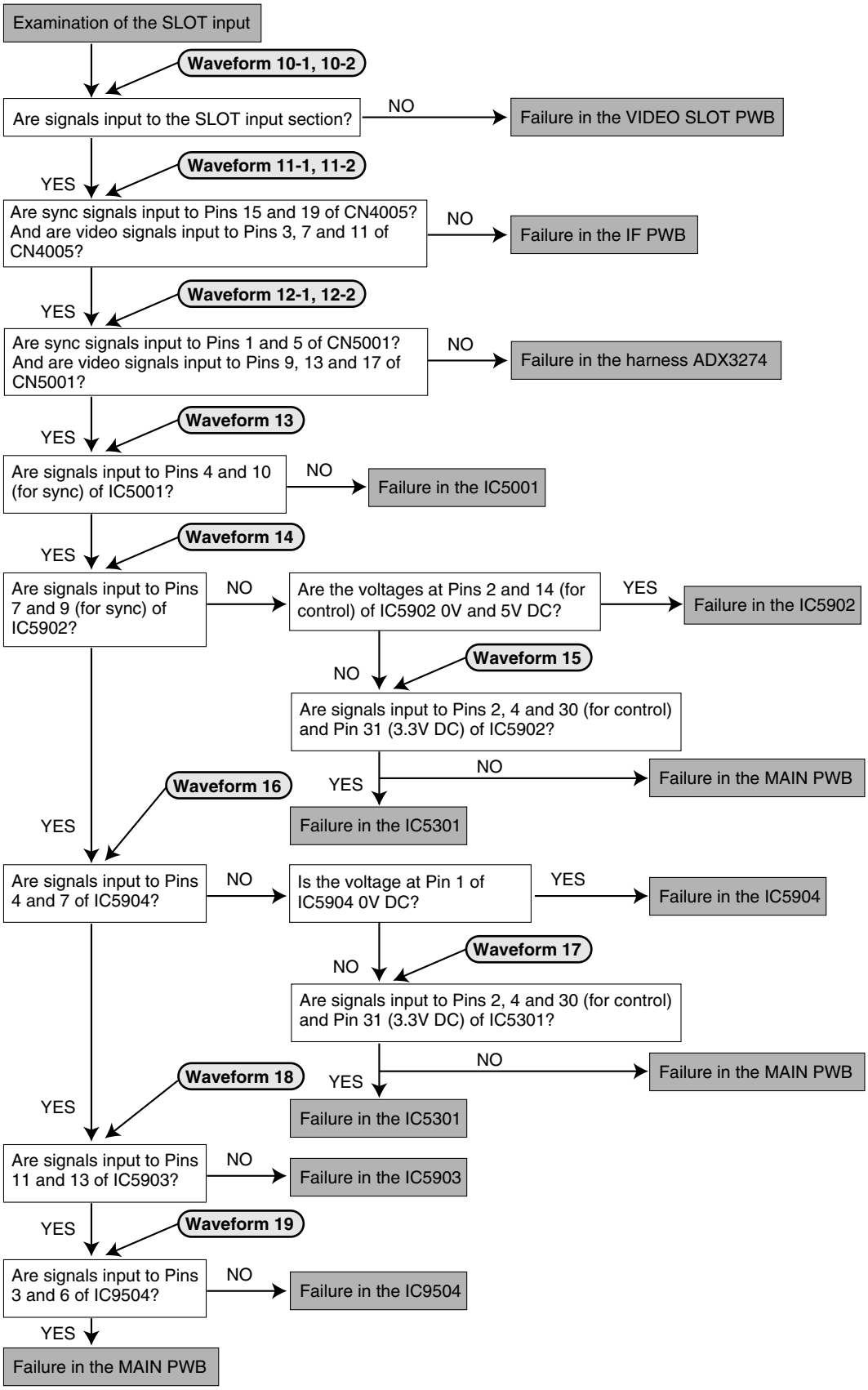
In a case of INPUT3 and INPUT4


Examination of the SLOT input
Does not either of INPUT3 or INPUT4 display?
YES
Failure in the VIDEO SLOT PWB
NO
Waveform 29-1, 29-2
Are the sync and clock signals output from VIDEO SLOT PWB?
NO
Failure in the VIDEO SLOT PWB
NO
Waveform 29-1, 29-2
Are the sync and clock signals input to pins 1, 2 and 4 of CN6301?
NO
Failure in the I/F PWB or flexible cable
YES
Waveform 29-2
Is the clock signal input to pin 2 of IC6302?
NO
Failure in the IC6302 and peripheral parts
YES
Waveform 29-1, 29-2
Are the sync and clock signals input to pins 168, 169 and 172 of IC6301?
NO
Failure in the IC6301 and peripheral parts
YES
Waveform 29-1, 29-2
Is the clock signal input to pin 2 of IC6304?
NO
Failure in the IC6304 and peripheral parts
YES
Failure in the MAIN PWB

In a case of SLOT input (analog signal)

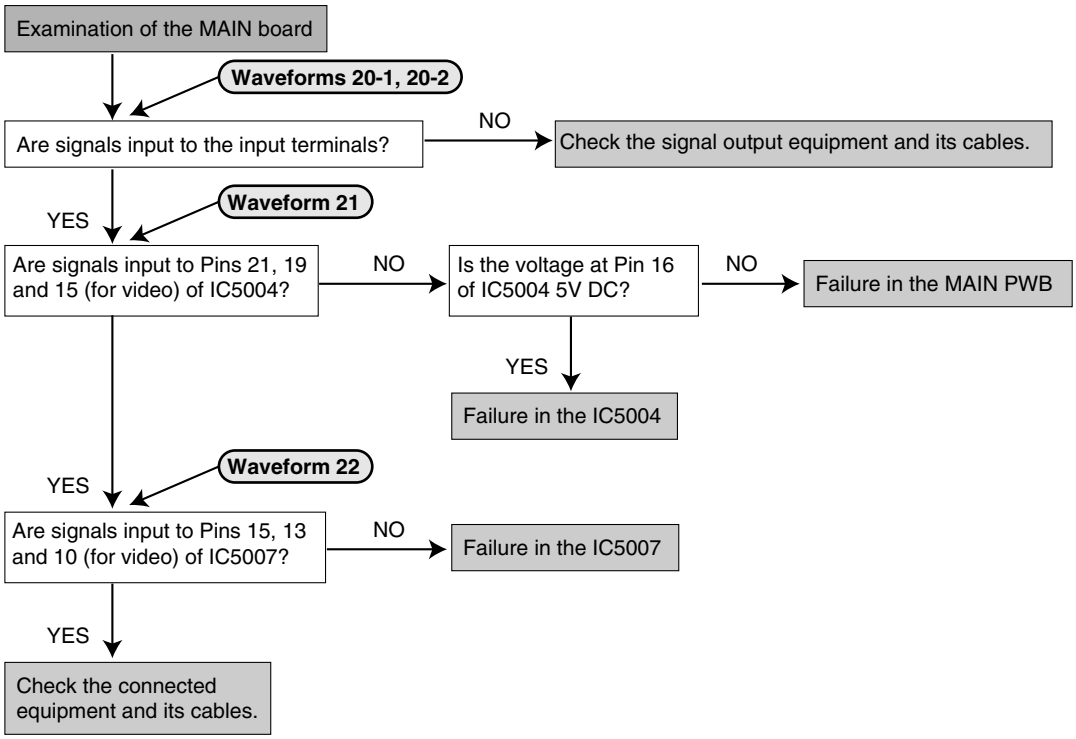
No image

In a case of INPUT5

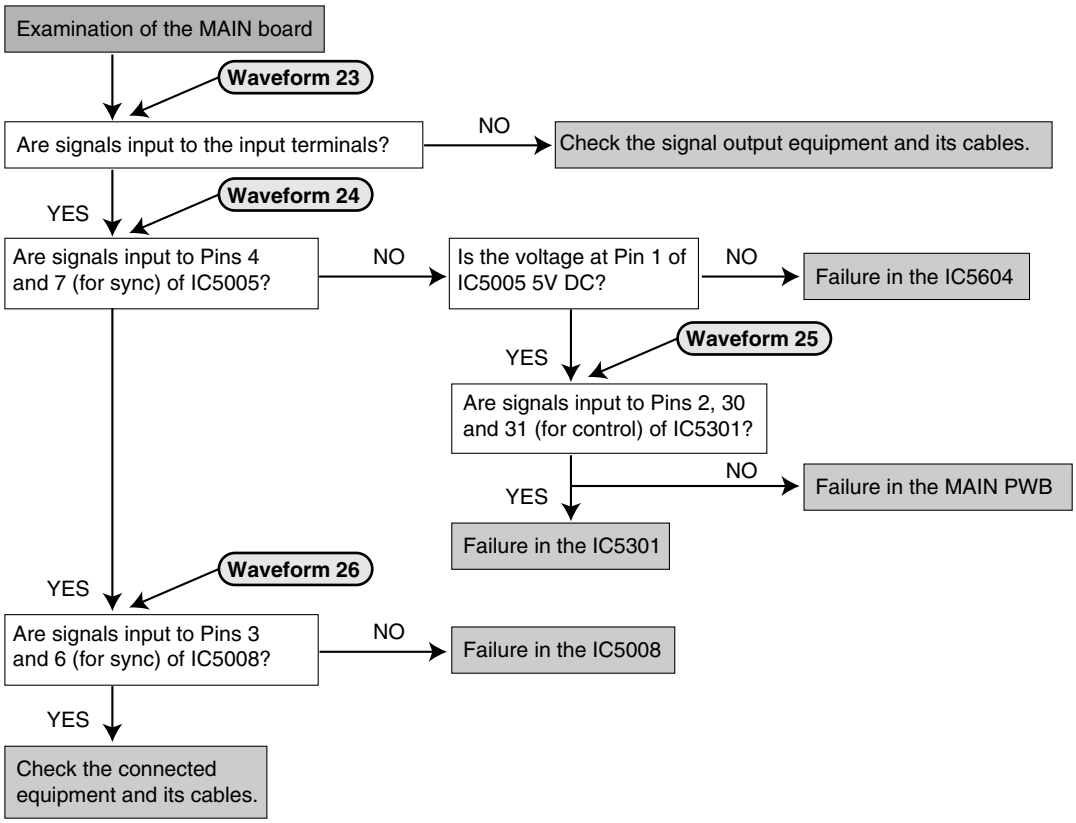

Examination of the SLOT input
Waveform 10-1, 10-2
Are signals input to the SLOT input section?
NO
Failure in the VIDEO SLOT PWB
YES
Waveform 11-1, 11-2
Are sync signals input to Pins 15 and 19 of CN4005? And are video signals input to Pins 3, 7 and 11 of CN4005?
NO
Failure in the IF PWB
YES
Waveform 12-1, 12-2
Are sync signals input to Pins 1 and 5 of CN5001? And are video signals input to Pins 9, 13 and 17 of CN5001?
NO
Failure in the harness ADX3274
YES
Waveform 13
Are signals input to Pins 4 and 10 (for sync) of IC5001?
NO
Failure in the IC5001
YES
Waveform 14
Are signals input to Pins 7 and 9 (for sync) of IC5902?
NO
Are the voltages at Pins 2 and 14 (for control) of IC5902 0V and 5V DC?
YES
Failure in the IC5902
NO
Waveform 15
Are signals input to Pins 2, 4 and 30 (for control) and Pin 31 (3.3V DC) of IC5902?
NO
Failure in the MAIN PWB
YES
Failure in the IC5301
YES
Waveform 16
Are signals input to Pins 4 and 7 of IC5904?
NO
Is the voltage at Pin 1 of IC5904 0V DC?
YES
Failure in the IC5904
NO
Waveform 17
Are signals input to Pins 2, 4 and 30 (for control) and Pin 31 (3.3V DC) of IC5301?
NO
Failure in the MAIN PWB
YES
Failure in the IC5301
YES
Waveform 18
Are signals input to Pins 11 and 13 of IC5903?
NO
Failure in the IC5903
YES
Waveform 19
Are signals input to Pins 3 and 6 of IC9504?
NO
Failure in the IC9504
YES
Failure in the MAIN PWB

In a case of PCOUT

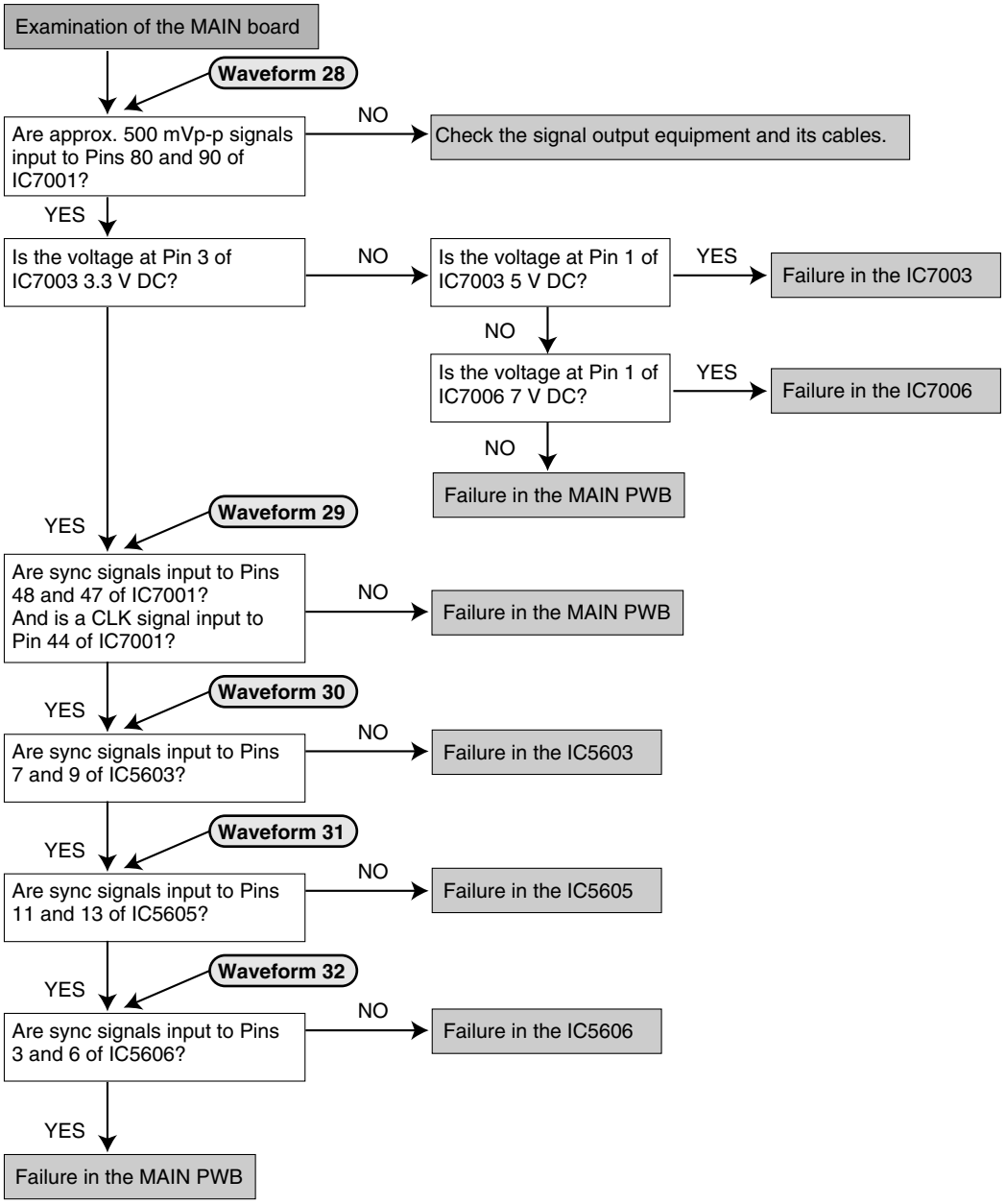
Verification of the video section


Examination of the MAIN board
Waveforms 20-1, 20-2
Are signals input to the input terminals?
NO
Check the signal output equipment and its cables.
YES
Waveform 21
Are signals input to Pins 21, 19 and 15 (for video) of IC5004?
NO
Is the voltage at Pin 16 of IC5004 5V DC?
NO
Failure in the MAIN PWB
YES
Failure in the IC5004
YES
Waveform 22
Are signals input to Pins 15, 13 and 10 (for video) of IC5007?
NO
Failure in the IC5007
YES
Check the connected equipment and its cables.

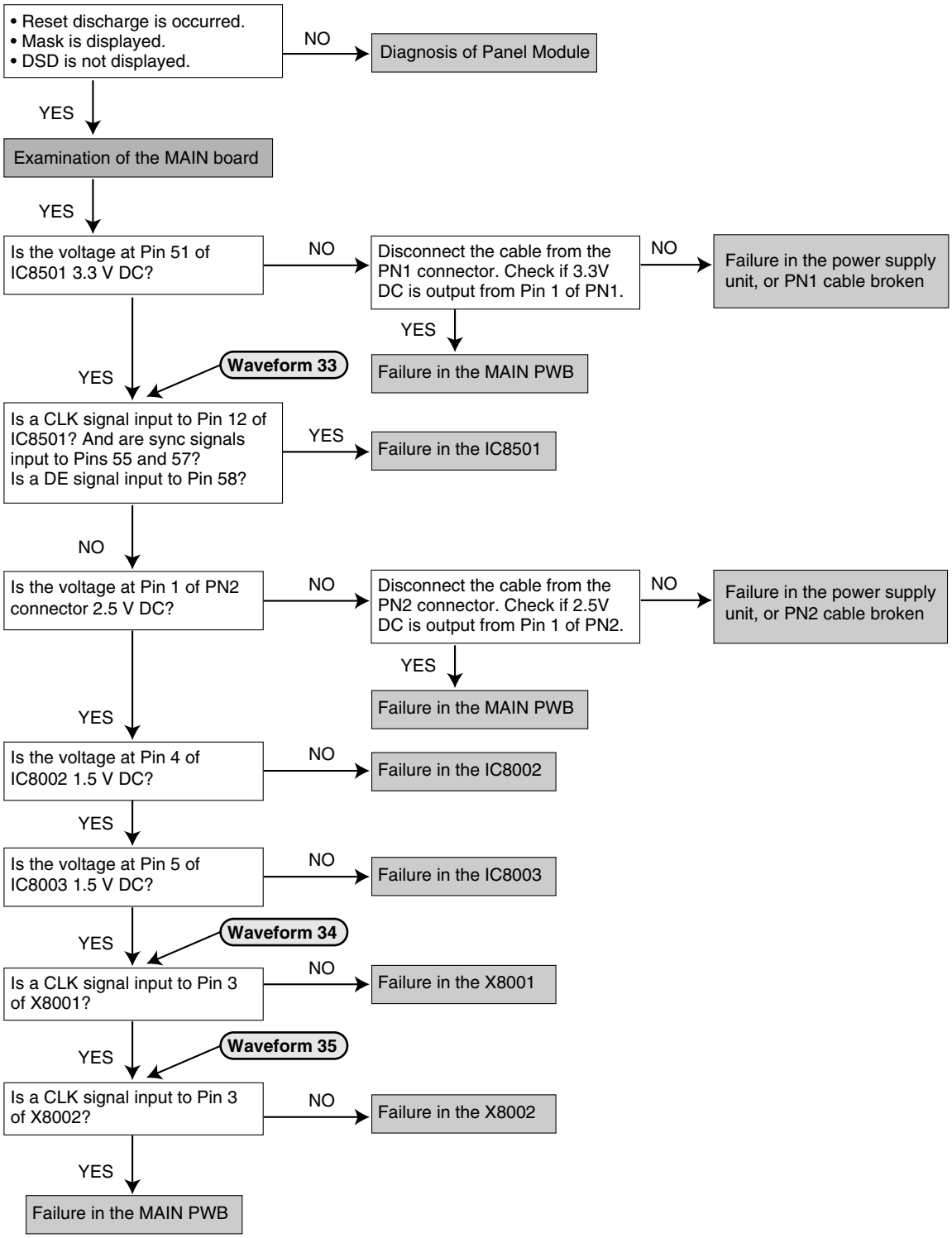
Verification of the sync section


Examination of the MAIN board
Waveform 23
Are signals input to the input terminals?
NO
Check the signal output equipment and its cables.
YES
Waveform 24
Are signals input to Pins 4 and 7 (for sync) of IC5005?
NO
Is the voltage at Pin 1 of IC5005 5V DC?
NO
Failure in the IC5604
YES
Waveform 25
Are signals input to Pins 2, 30 and 31 (for control) of IC5301?
NO
YES
Failure in the MAIN PWB
Failure in the IC5301
YES
Waveform 26
Are signals input to Pins 3 and 6 (for sync) of IC5008?
NO
Failure in the IC5008
YES
Check the connected equipment and its cables.

In a case of inputs to INPUT2 (DVI)

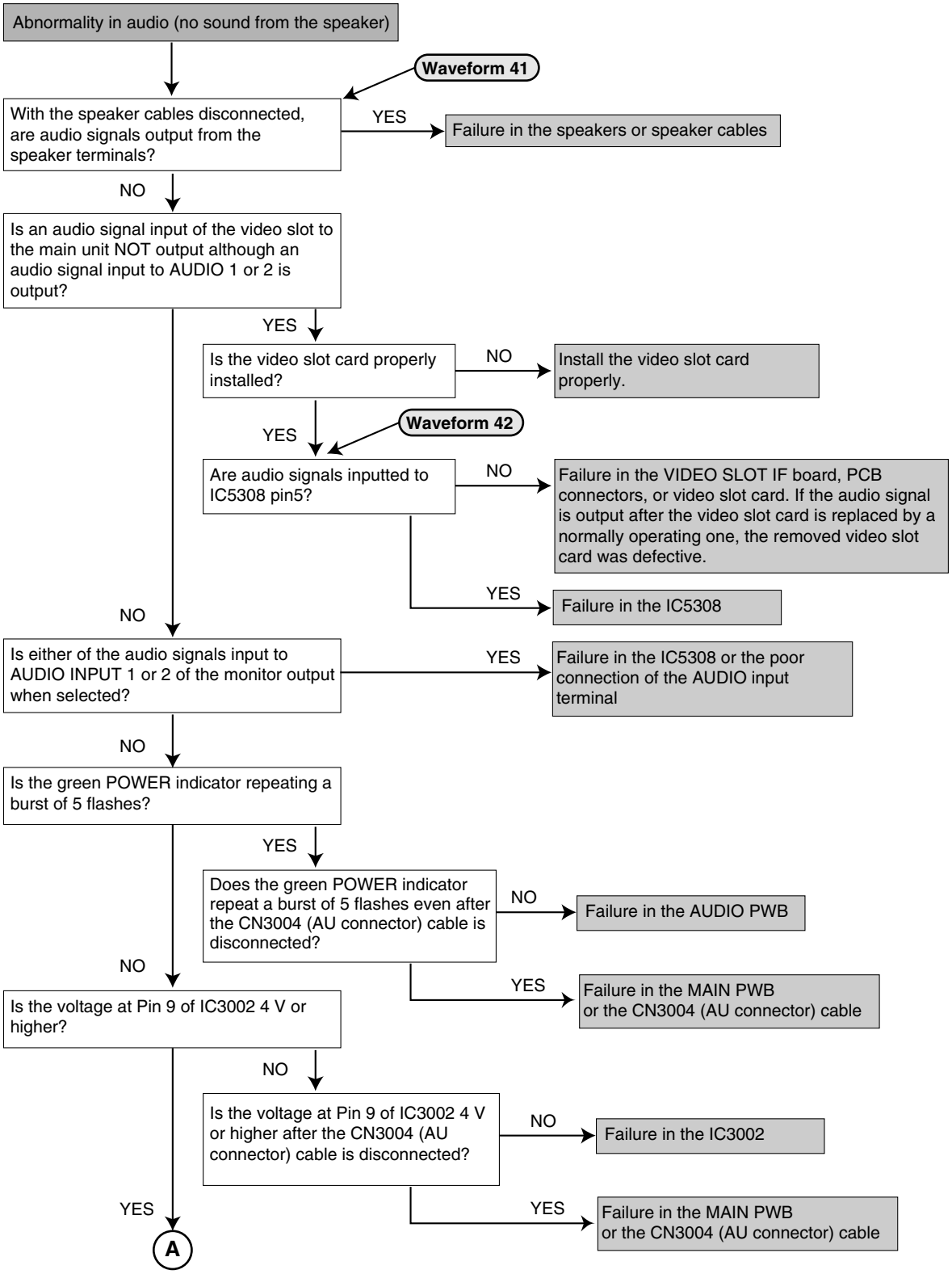

Examination of the MAIN board
Waveform 28
Are approx. 500 mVp-p signals input to Pins 80 and 90 of IC7001?
NO
Check the signal output equipment and its cables.
YES
Is the voltage at Pin 3 of IC7003 3.3 V DC?
NO
Is the voltage at Pin 1 of IC7003 5 V DC?
YES
Failure in the IC7003
NO
Is the voltage at Pin 1 of IC7006 7 V DC?
YES
Failure in the IC7006
NO
Failure in the MAIN PWB
YES
Waveform 29
Are sync signals input to Pins 48 and 47 of IC7001? And is a CLK signal input to Pin 44 of IC7001?
NO
Failure in the MAIN PWB
YES
Waveform 30
Are sync signals input to Pins 7 and 9 of IC5603?
NO
Failure in the IC5603
YES
Waveform 31
Are sync signals input to Pins 11 and 13 of IC5605?
NO
Failure in the IC5605
YES
Waveform 32
Are sync signals input to Pins 3 and 6 of IC5606?
NO
Failure in the IC5606
YES
Failure in the MAIN PWB

In a case when no image from any input appears


• Reset discharge is occurred.
• Mask is displayed.
• DSD is not displayed.
NO
Diagnosis of Panel Module
YES
Examination of the MAIN board
YES
Is the voltage at Pin 51 of IC8501 3.3 V DC?
NO
Disconnect the cable from the PN1 connector. Check if 3.3V DC is output from Pin 1 of PN1.
NO
Failure in the power supply unit, or PN1 cable broken
YES
Failure in the MAIN PWB
YES
Waveform 33
Is a CLK signal input to Pin 12 of IC8501? And are sync signals input to Pins 55 and 57? Is a DE signal input to Pin 58?
YES
Failure in the IC8501
NO
Is the voltage at Pin 1 of PN2 connector 2.5 V DC?
NO
Disconnect the cable from the PN2 connector. Check if 2.5V DC is output from Pin 1 of PN2.
NO
Failure in the power supply unit, or PN2 cable broken
YES
Failure in the MAIN PWB
YES
Is the voltage at Pin 4 of IC8002 1.5 V DC?
NO
Failure in the IC8002
YES
Is the voltage at Pin 5 of IC8003 1.5 V DC?
NO
Failure in the IC8003
YES
Waveform 34
Is a CLK signal input to Pin 3 of X8001?
NO
Failure in the X8001
YES
Waveform 35
Is a CLK signal input to Pin 3 of X8002?
NO
Failure in the X8002
YES
Failure in the MAIN PWB

3. Abnormality in audio

Note: Before performing a failure diagnosis, be sure to check that the settings of the unit are properly made by referring to its specifications and instruction manual.
If speaker outputs with different polarities or a speaker output and ground are short-circuited, the protection circuit is activated, and audio will not be output. In this case, turn the power off at the Main Power Switch, make connections properly, then turn the power back on again. The protection circuit will then be released.


Abnormality in audio (no sound from the speaker)
Waveform 41
With the speaker cables disconnected, are audio signals output from the speaker terminals?
YES
Failure in the speakers or speaker cables
NO
Is an audio signal input of the video slot to the main unit NOT output although an audio signal input to AUDIO 1 or 2 is output?
YES
Is the video slot card properly installed?
NO
Install the video slot card properly.
YES
Waveform 42
Are audio signals inputted to IC5308 pin5?
NO
Failure in the VIDEO SLOT IF board, PCB connectors, or video slot card. If the audio signal is output after the video slot card is replaced by a normally operating one, the removed video slot card was defective.
YES
Failure in the IC5308
NO
Is either of the audio signals input to AUDIO INPUT 1 or 2 of the monitor output when selected?
YES
Failure in the IC5308 or the poor connection of the AUDIO input terminal
NO
Is the green POWER indicator repeating a burst of 5 flashes?
YES
Does the green POWER indicator repeat a burst of 5 flashes even after the CN3004 (AU connector) cable is disconnected?
NO
Failure in the AUDIO PWB
YES
Failure in the MAIN PWB or the CN3004 (AU connector) cable
NO
Is the voltage at Pin 9 of IC3002 4 V or higher?
NO
Is the voltage at Pin 9 of IC3002 4 V or higher after the CN3004 (AU connector) cable is disconnected?
NO
Failure in the IC3002
YES
Failure in the MAIN PWB or the CN3004 (AU connector) cable
YES
A

A

(A)

YES

Waveform 43

Are the PWM waveforms output from Pins 41, 43, 47 and 48 of IC3002?

NO

Are the voltages shown in the table below output from each pin of the PA connector (CN3003) on the AUDIO PWB?

Pin_No.	Name	Voltage
1	S + 12	12.5Vdc
2	S + 12	12.5Vdc
3	S + 12	12.5Vdc
4	GND	GND
5	GND	GND
6	GND	GND

NO → Failure in the power supply unit or the CN3002 connection cable

B

YES → Failure in the IC3002

YES

Is the 9 V DC applied to the both ends of L3005 and L3006?

NO → Failure in the IC3001, IC3002 and IC3004

YES

Waveform 44

Is the audio signal waveform output from Pin 11 of IC3001?

C

YES → Failure in the IC3002

NO

Are the waveforms shown below output from the AU connector (CN3004) on the MAIN PWB?

YES → Failure in the IC3001

Pin 8 5Vpp

Pin 9 5Vpp

Pin 7 9.0Vdc

Pin 5 3.3Vdc

Pins 1 and 3: Audio signal waveform

Waveform 45

D

NO

Are the waveforms shown below output from the AU connector (CN9001) on the MAIN PWB?

YES → Failure in the CN9001 connection cable (AU connector)

E

Pin 8 5Vpp

Pin 9 5Vpp

Pin 7 9.0Vdc

Pin 5 3.3Vdc

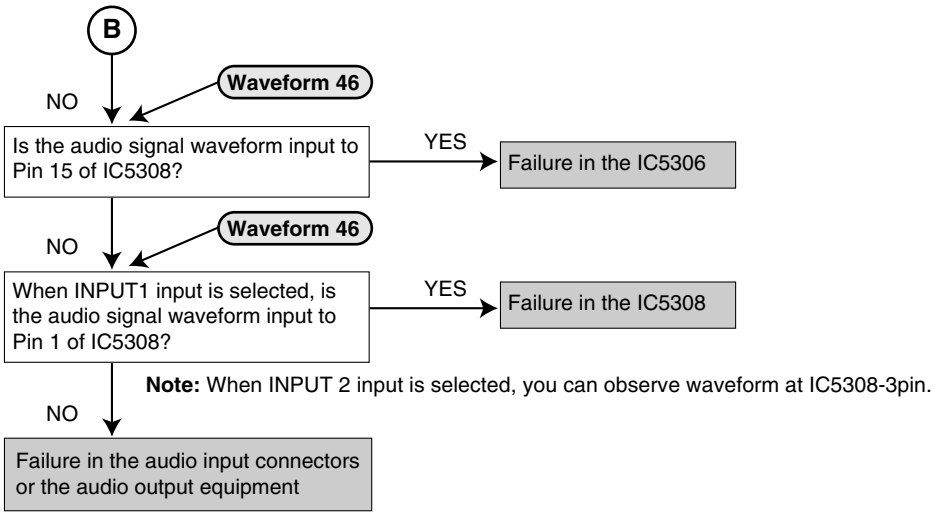
Pins 1 and 3: Audio signal waveform

Waveform 45

F

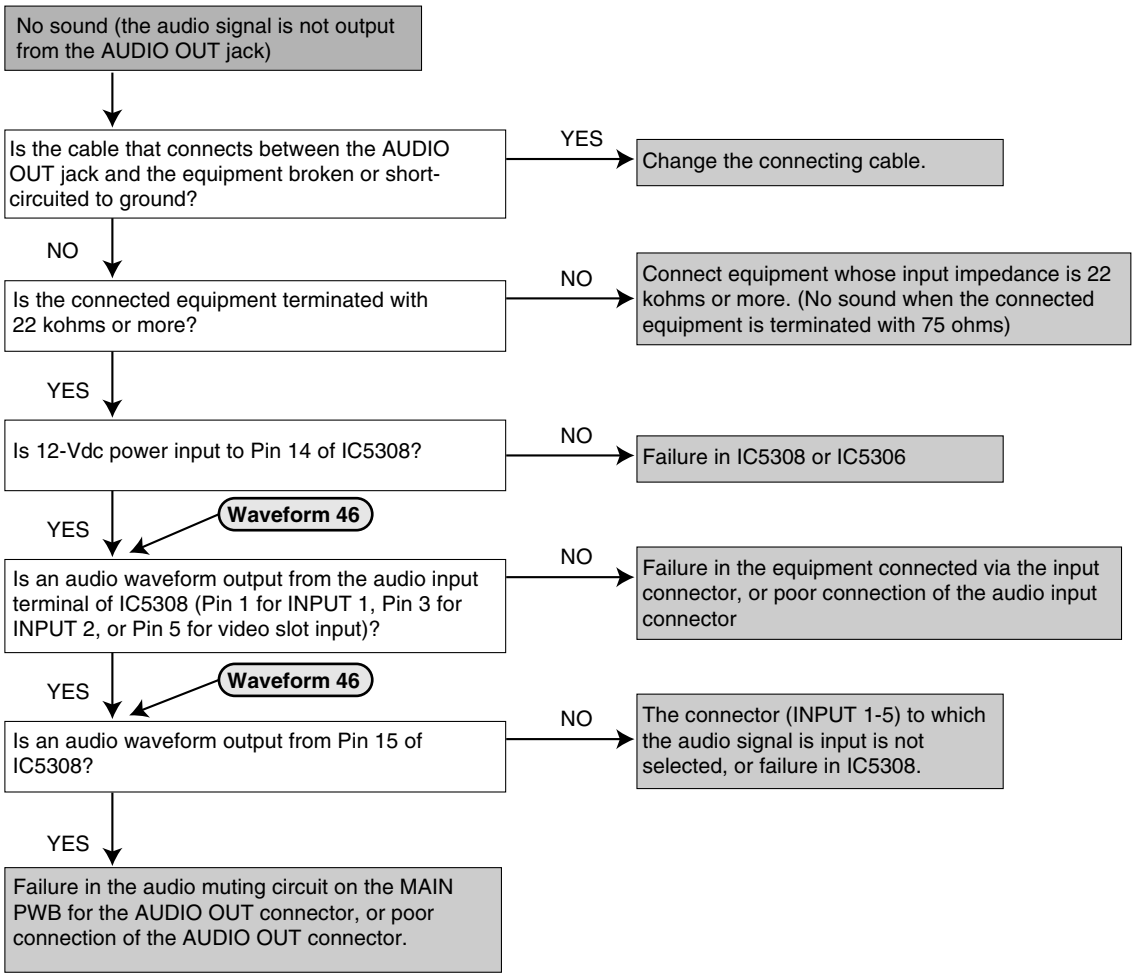
NO

(B)

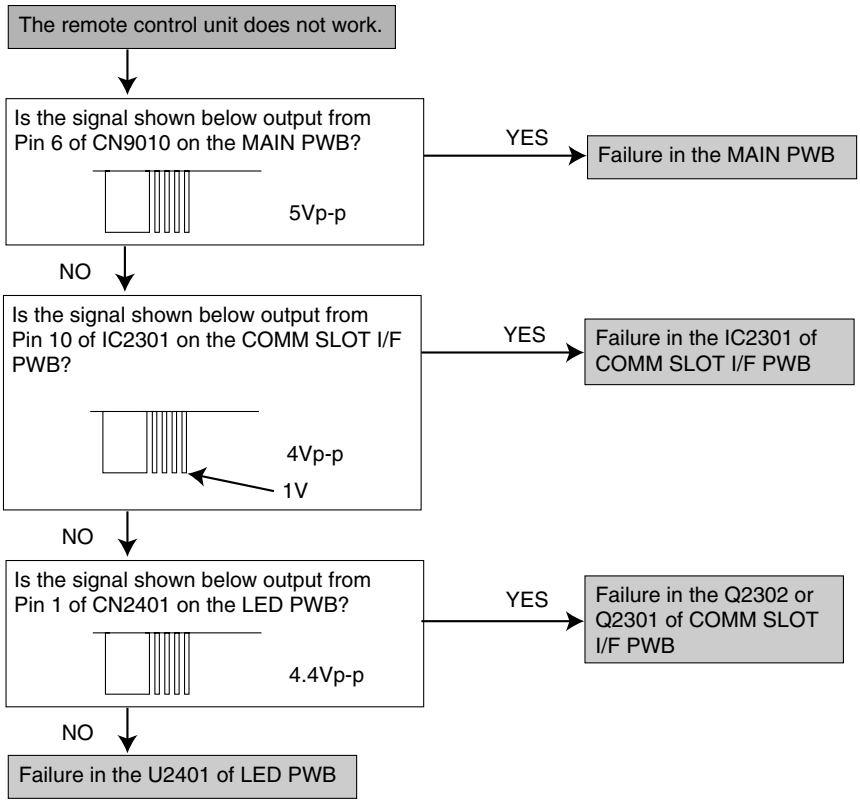

B
Waveform 46
NO
Is the audio signal waveform input to Pin 15 of IC5308?
YES
Failure in the IC5306
Waveform 46
NO
When INPUT1 input is selected, is the audio signal waveform input to Pin 1 of IC5308?
YES
Failure in the IC5308
NO
Failure in the audio input connectors or the audio output equipment

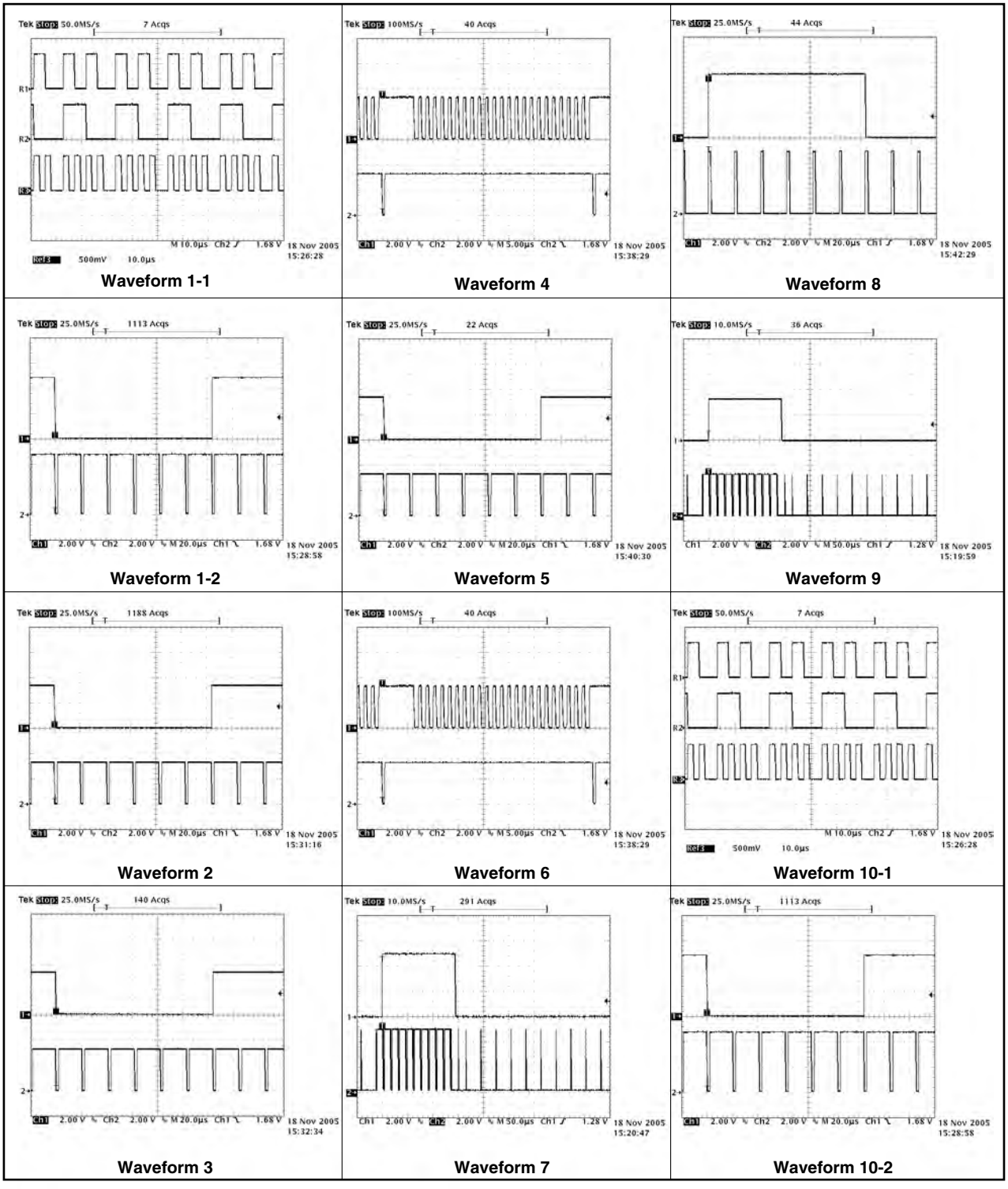
Note: When INPUT 2 input is selected, you can observe waveform at IC5308-3pin.

The following is a flowchart for failure diagnosis when the audio signal is not output from the AUDIO OUT jack (stereo mini).


No sound (the audio signal is not output from the AUDIO OUT jack)
Is the cable that connects between the AUDIO OUT jack and the equipment broken or short-circuited to ground?
YES
Change the connecting cable.
NO
Is the connected equipment terminated with 22 kohms or more?
NO
Connect equipment whose input impedance is 22 kohms or more. (No sound when the connected equipment is terminated with 75 ohms)
YES
Is 12-Vdc power input to Pin 14 of IC5308?
NO
Failure in IC5308 or IC5306
YES
Waveform 46
Is an audio waveform output from the audio input terminal of IC5308 (Pin 1 for INPUT 1, Pin 3 for INPUT 2, or Pin 5 for video slot input)?
NO
Failure in the equipment connected via the input connector, or poor connection of the audio input connector
YES
Waveform 46
Is an audio waveform output from Pin 15 of IC5308?
NO
The connector (INPUT 1-5) to which the audio signal is input is not selected, or failure in IC5308.
YES
Failure in the audio muting circuit on the MAIN PWB for the AUDIO OUT connector, or poor connection of the AUDIO OUT connector.

4. Failure of a remote control unit


The remote control unit does not work.
Is the signal shown below output from Pin 6 of CN9010 on the MAIN PWB?
5Vp-p
YES
Failure in the MAIN PWB
NO
Is the signal shown below output from Pin 10 of IC2301 on the COMM SLOT I/F PWB?
4Vp-p
1V
YES
Failure in the IC2301 of COMM SLOT I/F PWB
NO
Is the signal shown below output from Pin 1 of CN2401 on the LED PWB?
4.4Vp-p
YES
Failure in the Q2302 or Q2301 of COMM SLOT I/F PWB
NO
Failure in the U2401 of LED PWB



Waveform 1-1

Waveform 4

Waveform 8

Waveform 1-2

Waveform 5

Waveform 9

Waveform 2

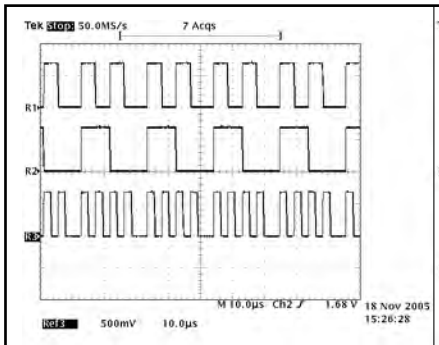
Waveform 6

Waveform 10-1

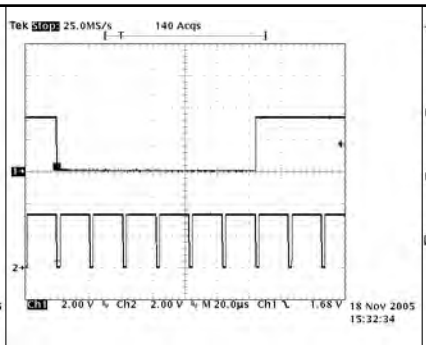
Waveform 3

Waveform 7

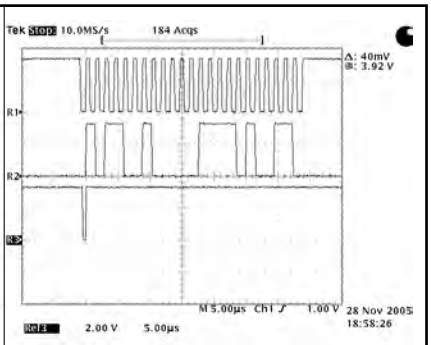
Waveform 10-2



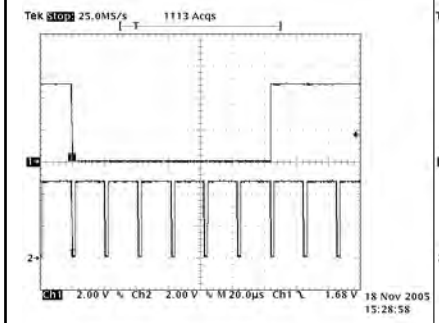
Waveform 11-1



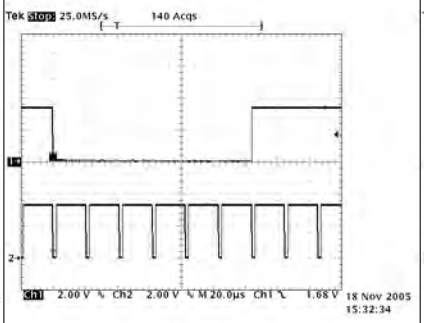
Waveform 13



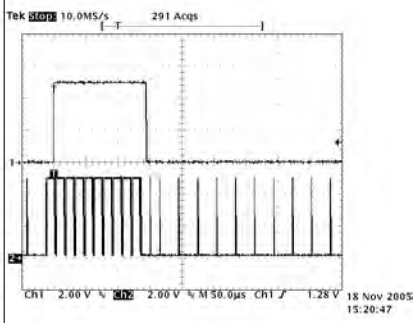
Waveform 17



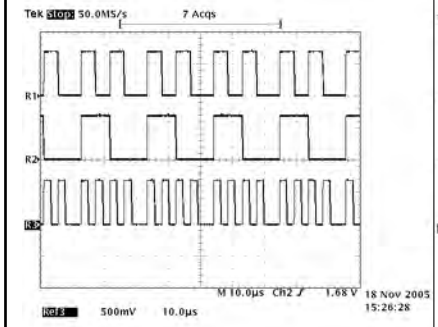
Waveform 11-2



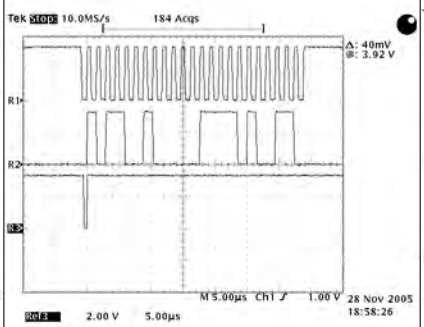
Waveform 14



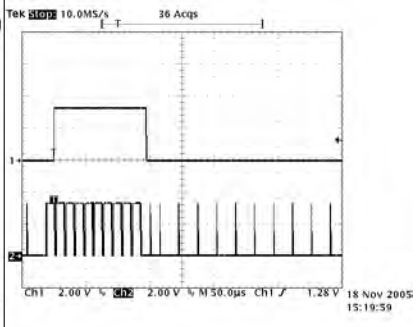
Waveform 18



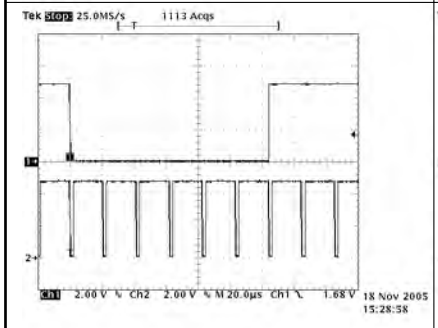
Waveform 12-1



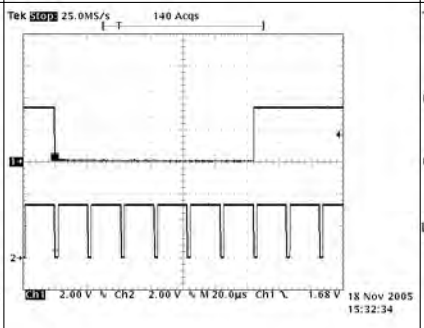
Waveform 15



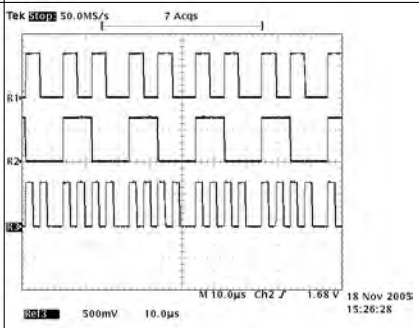
Waveform 19



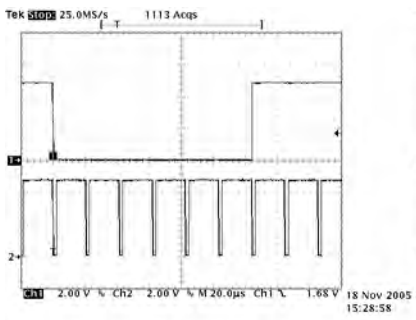
Waveform 12-2



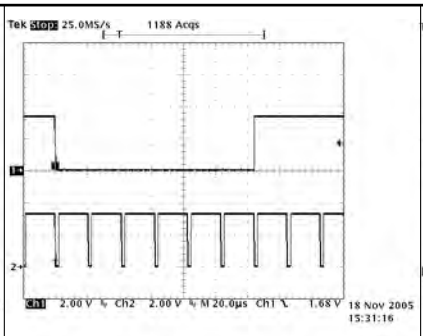
Waveform 16



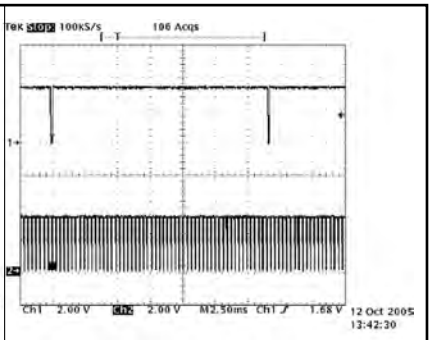
Waveform 20-1



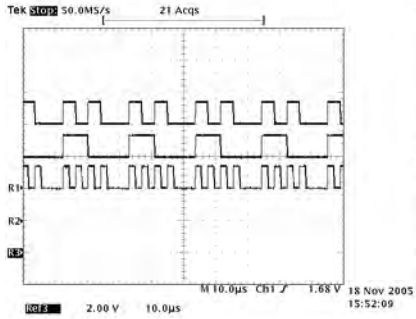
Waveform 20-2



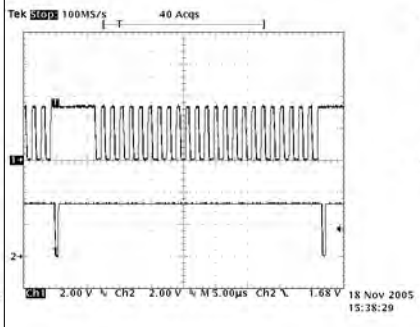
Waveform 24



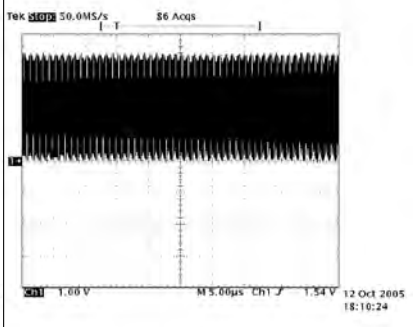
Waveform 29-1



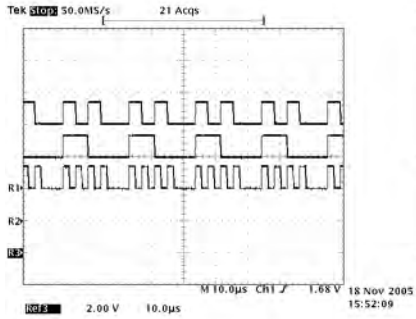
Waveform 21



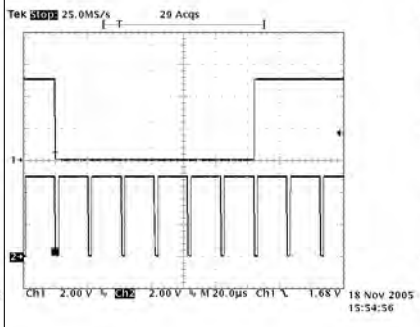
Waveform 25



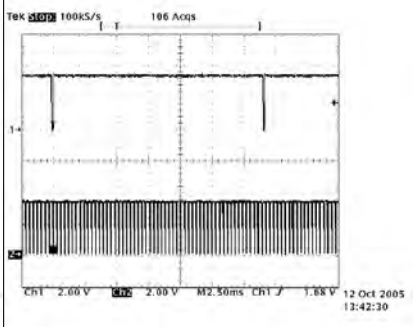
Waveform 29-2



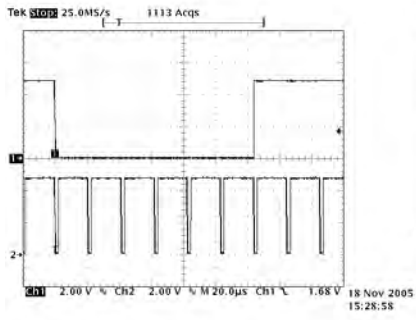
Waveform 22



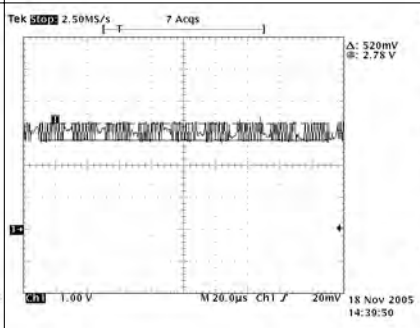
Waveform 26



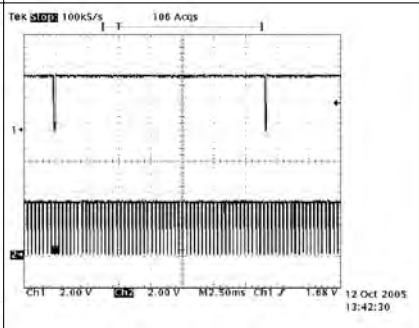
Waveform 30



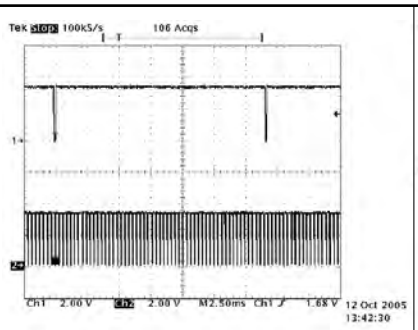
Waveform 23



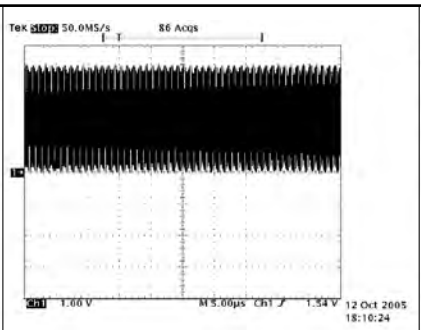
Waveform 28



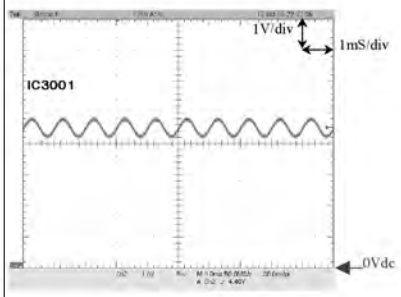
Waveform 31



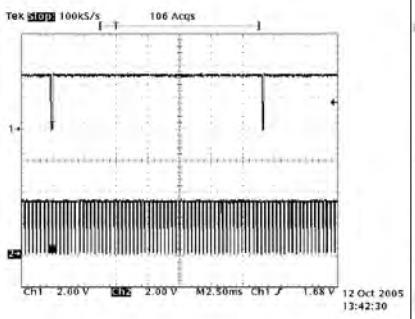
Waveform 32



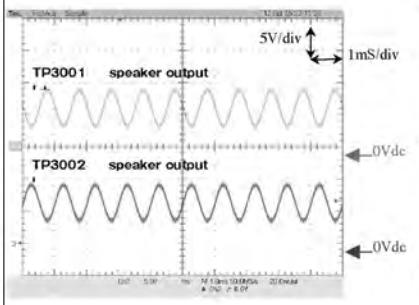
Waveform 35



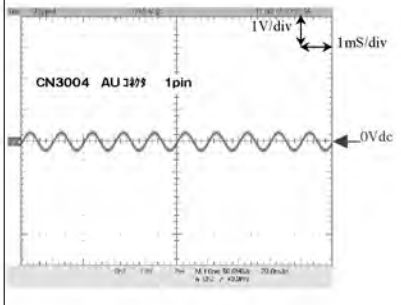
Waveform 44



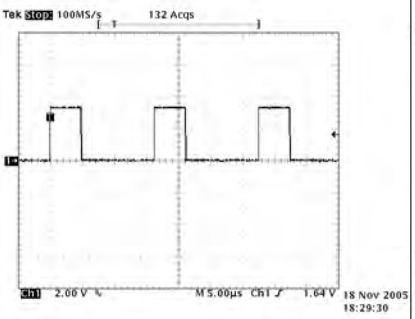
Waveform 33-1



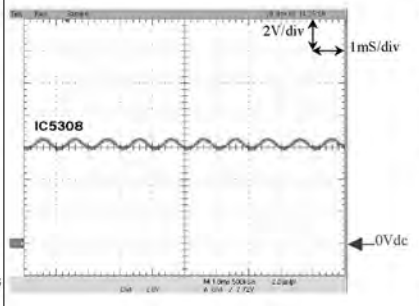
Waveform 41



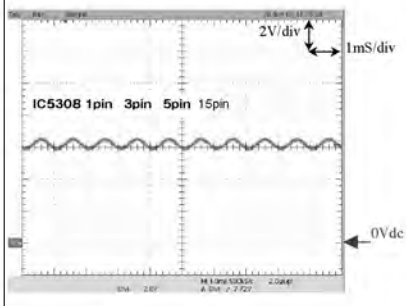
Waveform 45



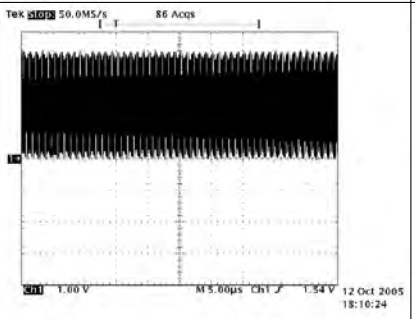
Waveform 33-2



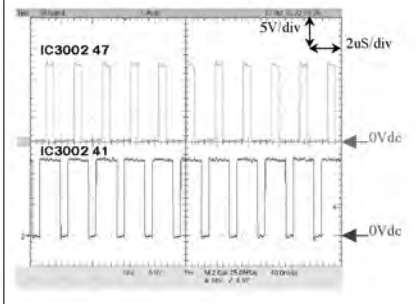
Waveform 42



Waveform 46



Waveform 34



Waveform 43

Conditions of signal input
Audio input connector: AUDIO 1 or Video slot card (L ch)
Input signal level: 200mVrms
Input signal frequency: 1 kHz
Volume: Max

7.1.4 POWER ON/OFF FUNCTION FOR THE LARGE POWER SIGNAL SYSTEM

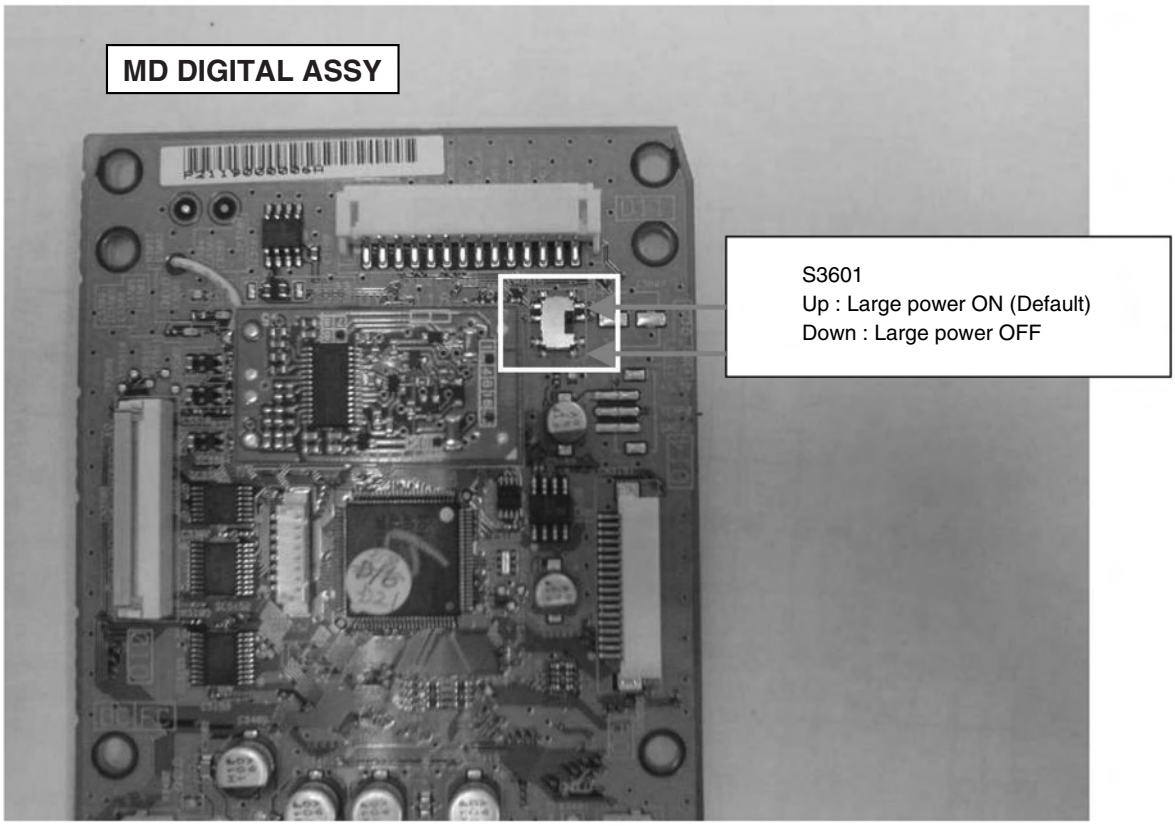
POWER ON/OFF FUNCTION FOR THE LARGE POWER SIGNAL SYSTEM

Function : To prevent a power-down from being generated, operation of only the digital-signal processing is enabled, and power is not supplied to the panel driving system (large power signal system).

Usages : 1. In a case where a check is required of signals' being correctly output to the driving systems during a repair, etc.
2. In a case where diagnosis is required for judging whether the power to the large power signal system or small-signal system has been down when a power-down occurred

Methods : Switch off the large power signal system swtich S3601 (downward) on the MD DIGITAL Assy.

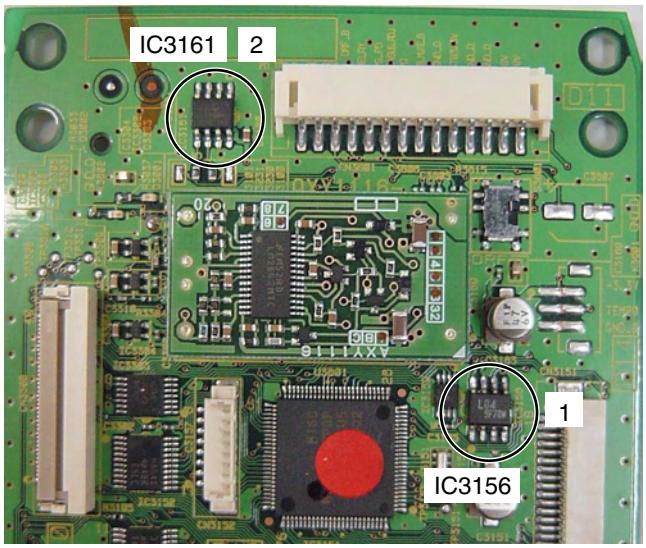
Notes : • When the power to the large power signal system is off, as the PD signal is muted, power-downs other than PS_PD are not activated.
• As soon as the switch turned on while the power to the large power signal system is off, a power-down will occur. Be sure to turn the power off before switching on.



7.1.5 BACKUP WHEN THE MAIN UNIT IS ADJUSTED

How to replace the EEPROM

Data, such as adjustment data for the module, are stored in the EEPROM on the MD DIGITAL Assy.
When the MD DIGITAL Assy is to be replaced, also replace the part indicated in either 1 or 2 below:



1. Replacement of IC3156

IC3156 is the main EEPROM. When IC3156 is to be mounted on the MD DIGITAL Assy for service, transmission of backup data is NOT required. Do NOT send backup data.

2. Replacement of IC3161

IC3161 is the EEPROM for backup. When IC3161 is to be mounted on the MD DIGITAL Assy for service, transmission of backup data is required.
(See "How to back up adjustment data for the main unit (next page).")

■ Overview

Factory-preset adjustment data are stored in the EEPROM in the MD DIGITAL Assy. User adjustment data are automatically stored in the EEPROM for backup in the MD DIGITAL Assy.
When a replacement of the MD DIGITAL Assy is required, backed up user adjustment data can be copied from the original backup EEPROM to the main EEPROM of a new MD DIGITAL Assy if the original backup EEPROM is replaced with a new one.

■ Data to be backed up

- Voltage margin adjustment value
- Hour-meter data
- Adjustment value of the upper limit of the power supply
- Pulse-meter data
- Panel WB adjustment value
- Serial number
- Drive waveform adjustment value
- P-ON (Power-on) counter data
- PD/SD (Power-down/shutdown) log data

■ How to copy backed up data

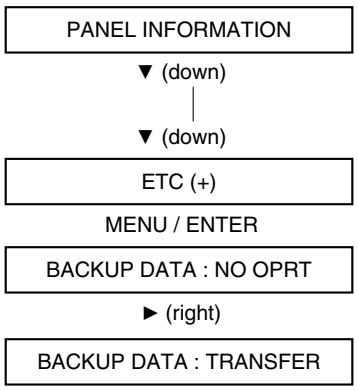
After the original backup EEPROM is mounted on the MD DIGITAL Assy for service, copy the backup data by either Method 1 or 2.

● Method 1

Using RS-232C commands
[FAY]
[BCP]

● Method 2

Using the Factory menu
How to display the Factory menu : Press **DISPLAY** key → Don't press any keys for 3 seconds →
Press the keys in the following order: **LEFT**, **UP**, **LEFT**, **RIGHT**, then **POWER**.



MENU / ENTER (Hold the keys pressed for 5 seconds.)

7.1.6 HOW TO CLEAR HISTORY DATA

■ How to clear log data

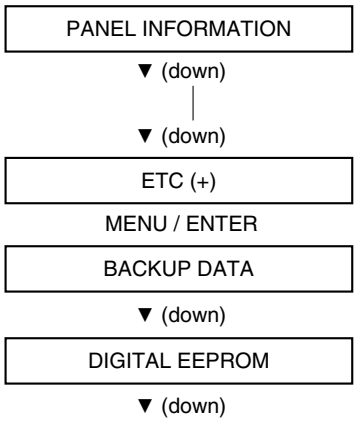
About clearing log data after an Assy replacement

In the backup EEPROM of the MD DIGITAL Assy, besides adjustment values of the main unit, data on power-on time and log data on defective parts, etc. are updated and stored. Among those data, some need to be cleared when the MD DIGITAL Assy is replaced during servicing.

Item	Content	Services			RS-232C Command
		Panel replacement	Power unit replacement	Other than those at left	
Hour meter	Accumulated display time	Clearing required	Clearing not required	Clearing not required	CHM
Shutdown logs	Location where an SD was generated and the hour-meter value at that time	Clearing required	Clearing not required	Clearing not required	CSD
Power-down logs	Location where a PD was generated and the hour-meter value at that time	Clearing required	Clearing not required	Clearing not required	CPD
Pulse meter	Accumulated number of pulse emissions (Block 5)	Clearing required	Clearing not required	Clearing not required	CPM
Power-on count	Accumulated RELAY_ON counts	Clearing not required	Clearing required	Clearing not required	CPC

(1) To clear the data using RS-232C commands, first send the FAY command to enter Factory mode, then send a command shown in the table above.

(2) To clear the data using the Factory menu, first display the Factory menu by pressing the keys in the following step:
Press **DISPLAY** key → Don't press any keys for 3 seconds →
Press the keys in the following order: **LEFT**, **UP**, **LEFT**, **RIGHT**, then **POWER**.



To clear PD logs

PD INFO: NO ► (right) PD INFO: CLEAR

▼ (down) MENU / ENTER (Hold the keys pressed for 5 seconds.)

To clear SD logs

SD INFO: NO ► (right) SD INFO: CLEAR

▼ (down) MENU / ENTER (Hold the keys pressed for 5 seconds.)

To clear hour meter data

HR-MTR INFO: NO ► (right) HR-MTR INFO: CLEAR

▼ (down) MENU / ENTER (Hold the keys pressed for 5 seconds.)

To clear pulse meter data

PM/B1-B5 INFO: NO ► (right) PM/B1-B5 INFO: CLEAR

▼ (down) MENU / ENTER (Hold the keys pressed for 5 seconds.)

To clear power-on-count data

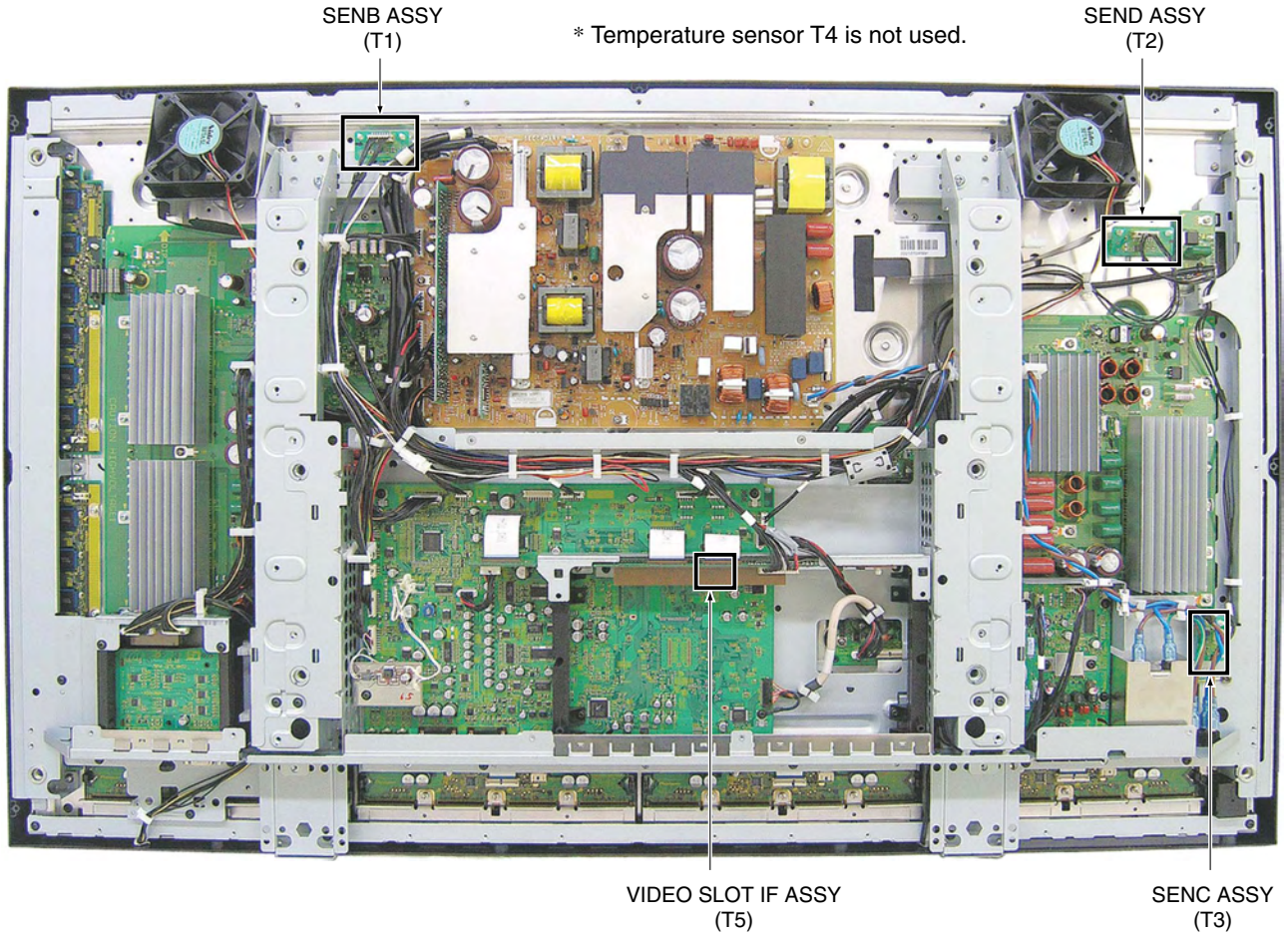
P COUNT INFO: NO ► (right) P COUNT INFO: CLEAR

▼ (down) MENU / ENTER (Hold the keys pressed for 5 seconds.)

7.1.7 FAN CONTROL

The fan is controlled by detecting the installation status (transversely, vertically, or inversely situated) of the unit, based on temperature data from temperature sensors T1-T3 and T5.

(1) Locations of the temperature sensors



(2) Fan control

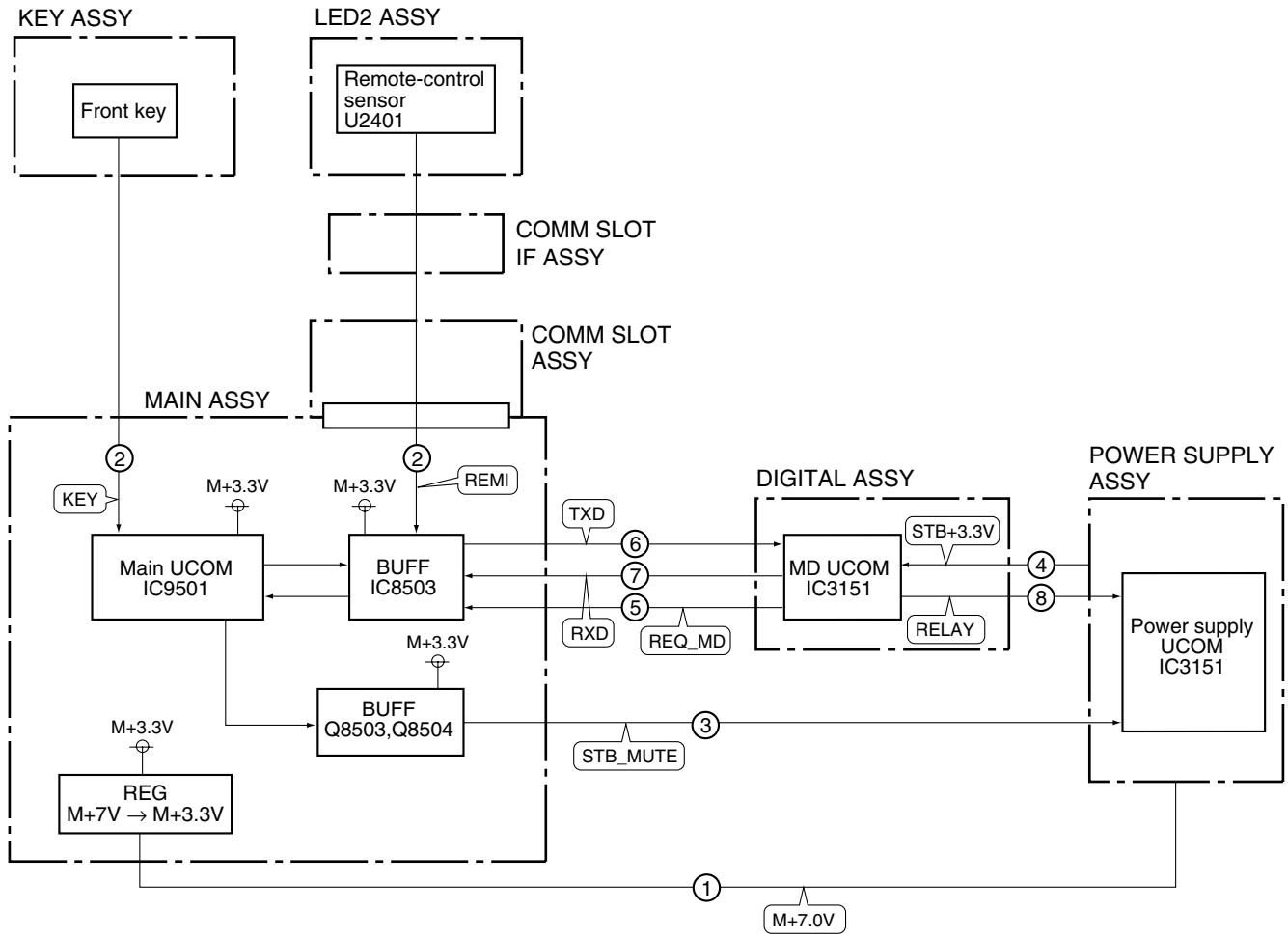
Menu	Detection Conditions of Installation Status	Fan Control	Judged Installation Status
OSD ANGLE=H or MIRROR MODE=X	When the conditions described in the cell below are not met	AUTO control (temperature detection) See Table 1 below.	Transversely situated
	Detection conditions of a vertically or inversely situated unit: T1 + 4 °C < T3 T3 ≧ 40 Conditions for canceling: Only by turning the power off then back on.	Fixed at H	Vertically or inversely situated
OSD ANGLE=V or MIRROR MODE=Y or XY	–	Fixed at H	Vertically or inversely situated

(Table 1) AUTO control (Unit: °C)

FAN Rotation Speed	Without Slot or With a Slot Made by Pioneer	With a Slot Made by Another Manufacturer
OFF ↔ L	68	55
L ↔ M	70	65
M ↔ H	74	69
Abnormal temperature	82	82

- The rotation speed of the fan is switched as shown in Table 1 above, upon detecting the temperature with sensors T1-T3 and T5.
- As hysteresis for switching the rotation speed of the fan, the status before switching is maintained for 30 seconds.
- When the detected temperature reaches the specified abnormal temperature, a shutdown process will proceed.
- Even if the detected temperature becomes lower from the temperatures specified for the rotation speed of L→OFF to those specified for OFF, the fan keeps rotating at low speed (does not stop). Setting the fan rotation speed to OFF is only possible by turning the power off then back on.

7.1.8 POWER ON SEQUENCE



Descriptions on operation

① When the main power switch on the main unit is set to ON, M+7 V is supplied from the POWER SUPPLY Assy to the main microcomputer to boot it.
② A request to turn on the power is issued from a key on the main unit or remote control unit.
③ The STB_MUTE signal (STB+3.3 V, ON/OFF control) is output from the main microcomputer to the power supply.
④ STB+3.3 V is supplied from the power supply to the MD microcomputer to boot it.
⑤ The MD microcomputer issues the REQ_MD signal to the main microcomputer. (QS2 data read request)
⑥ After confirming the QS2 data read request (confirming SD or PD), the main microcomputer issues PON.
⑦ The MD microcomputer sends a PON echo back to the main microcomputer.
⑧ The MD microcomputer issues the RELAY signal to turn on the unit.

7.1.9 DISASSEMBLY

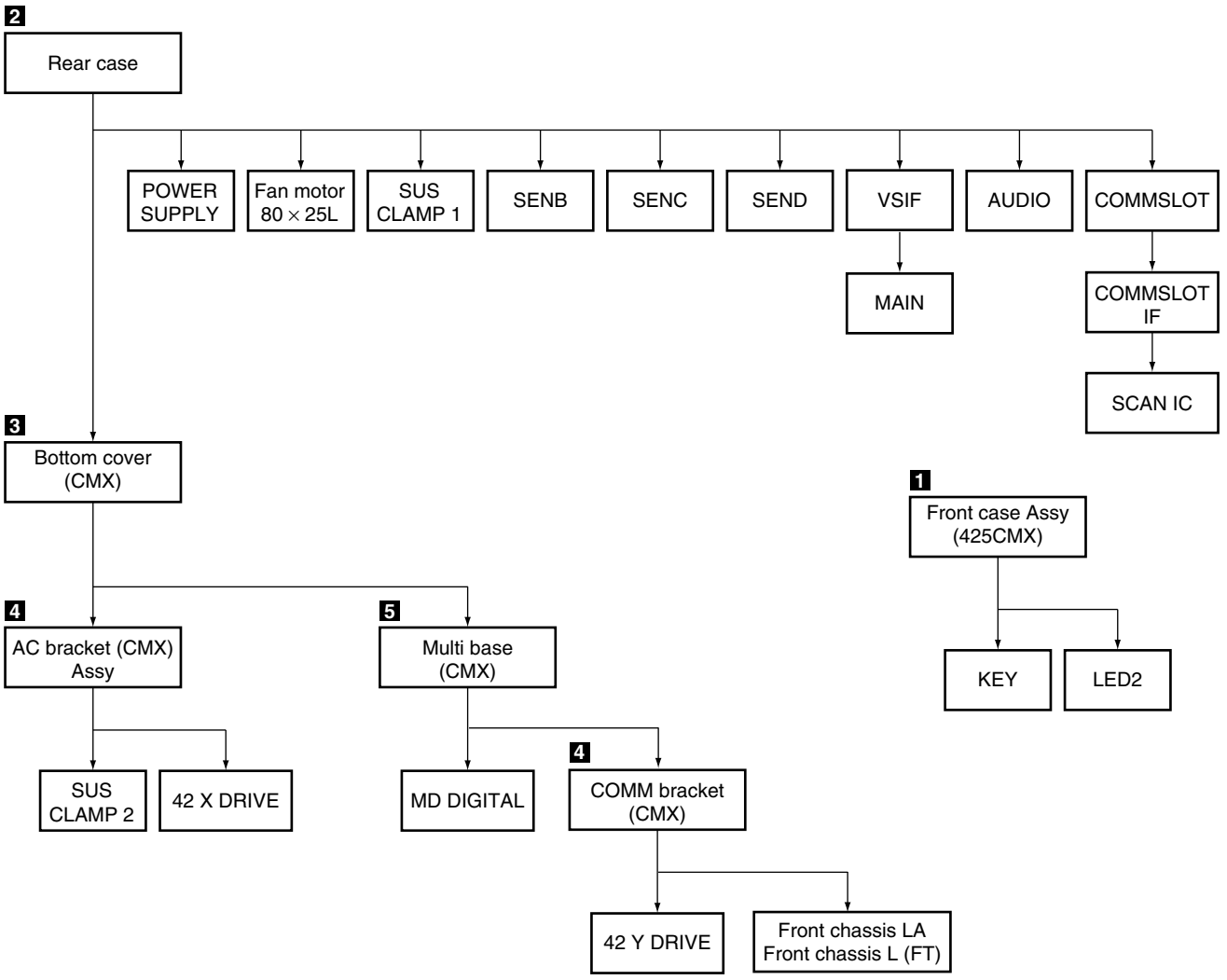
Note 1: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

Note 2: For performing the diagnosis shown below, the following jigs for service is required:

- Extension cable for 42 inch PDP diagnosis (GGD1469)
- Extension cable for 42 inch PDP diagnosis (GGP1075)

Chart of removal order for the main parts and boards

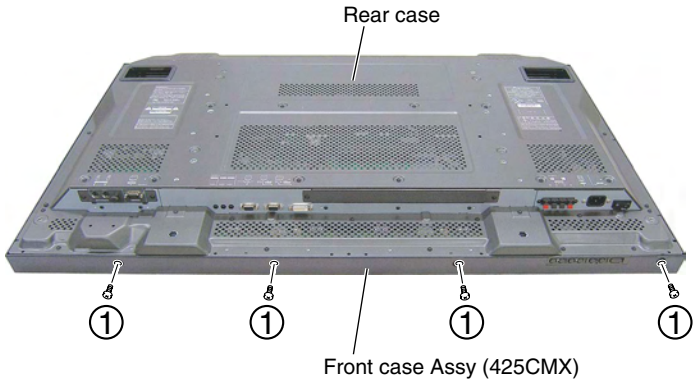
It is efficient to proceed with removal of the main parts and boards in the order shown in the chart below:



Disassembly

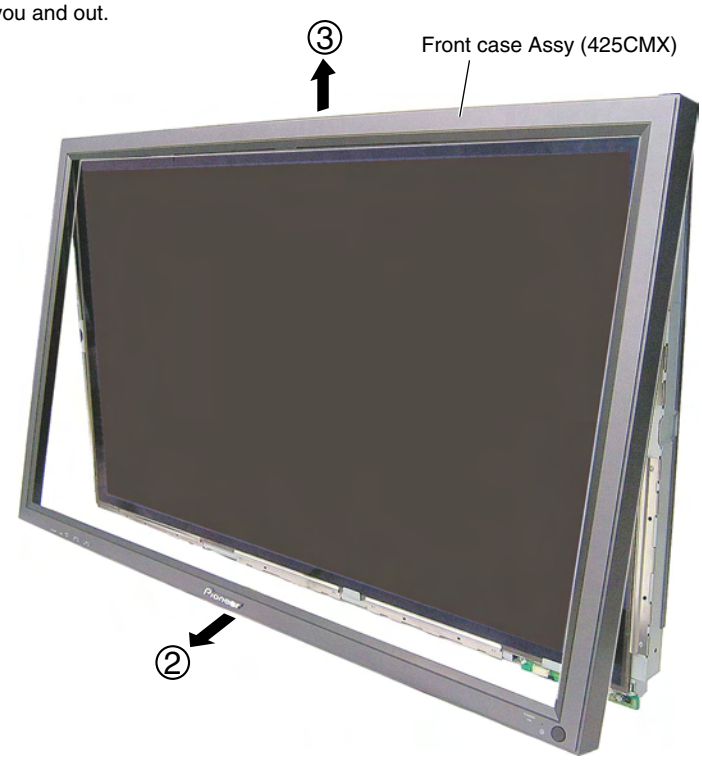
1 Front Case Assy (425CMX)

① Remove the four screws. (AMZ30P060FTB)



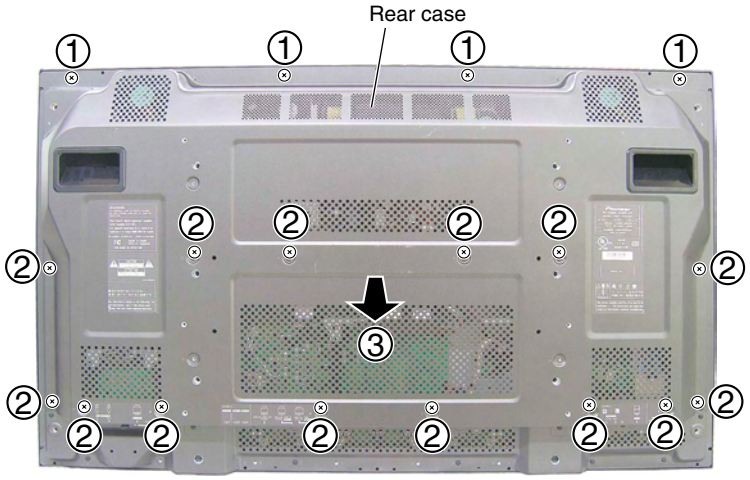
② Pull the lower part of the Front case Assy (425CMX) toward you and out.

③ Remove the Front case Assy (425CMX), by pulling it upward.



2 Rear Case

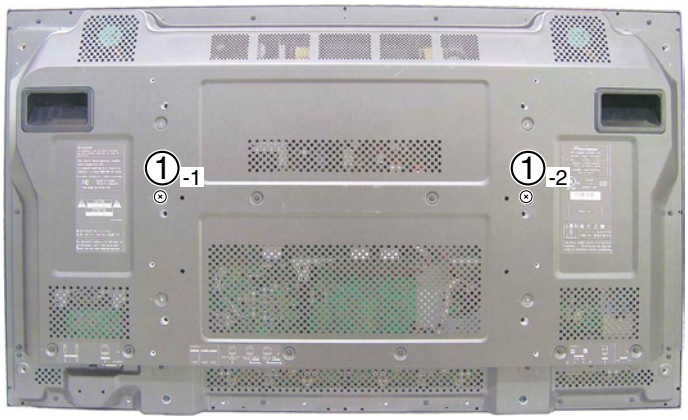
① Remove the four screws. (ABZ30P100FTB)
② Remove the 14 screws. (AMZ30P060FTB)
③ Remove the rear case.



● **About reattachment**

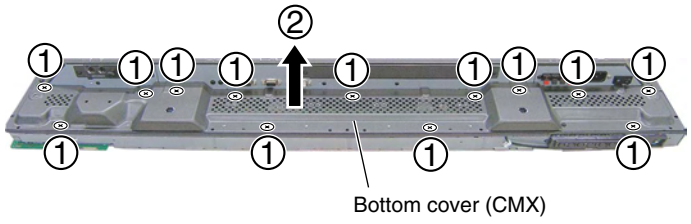
For easy reattachment, be sure to install the screws for the Rear case in the order indicated in the photo. After securing those screws in place, the other screws can be reattached in any order.

① Two screws (AMZ30P060FTB)

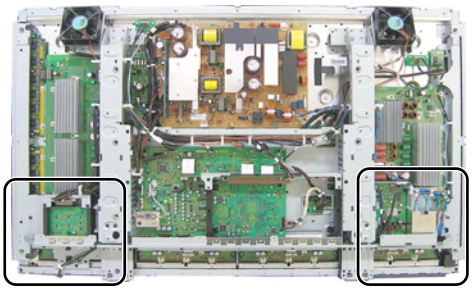


3 Bottom Cover (CMX)

① Remove the 13 screws. (AMZ30P060FTB)
② Remove the bottom cover (CMX).

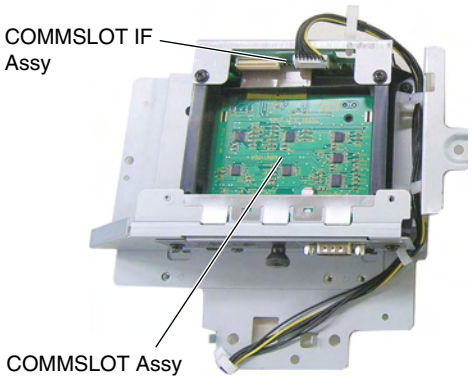


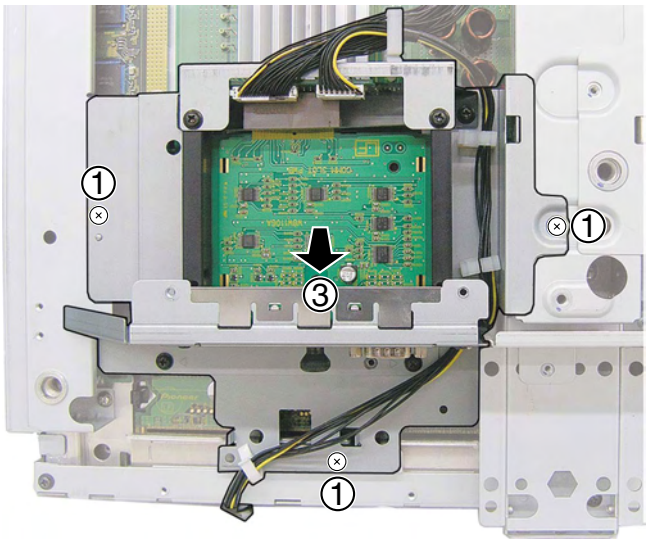
4 COMM Bracket and AC Bracket Blocks



● **COMM Bracket Block**

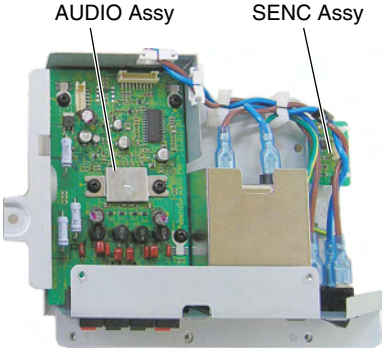
① Remove the three screws.
② Disconnect cables, as required.
③ Remove the COMM bracket Block.

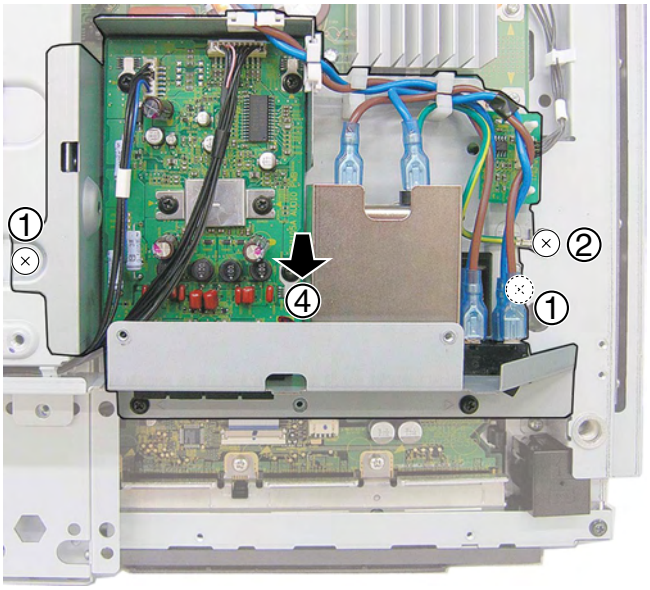




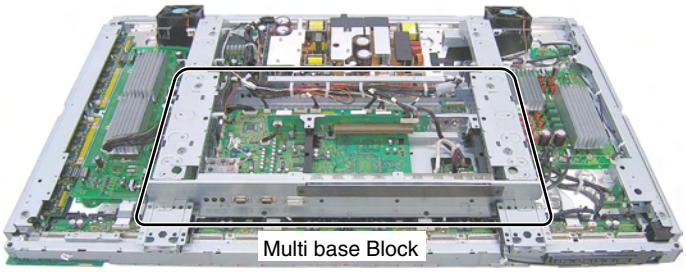
● **AC Bracket Block**

① Remove the two screws.
② Remove the one screw.
③ Disconnect cables, as required.
④ Remove the AC bracket Block.

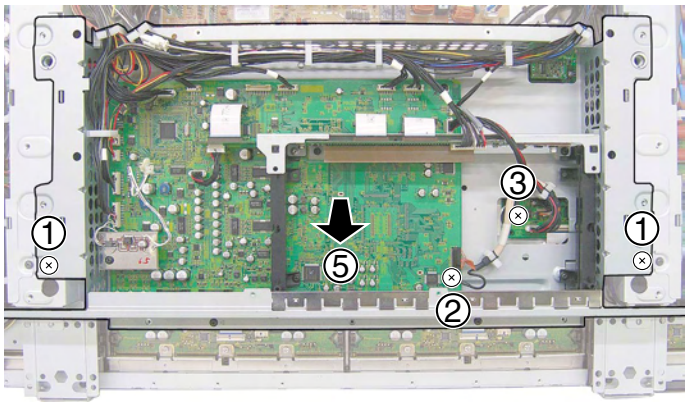


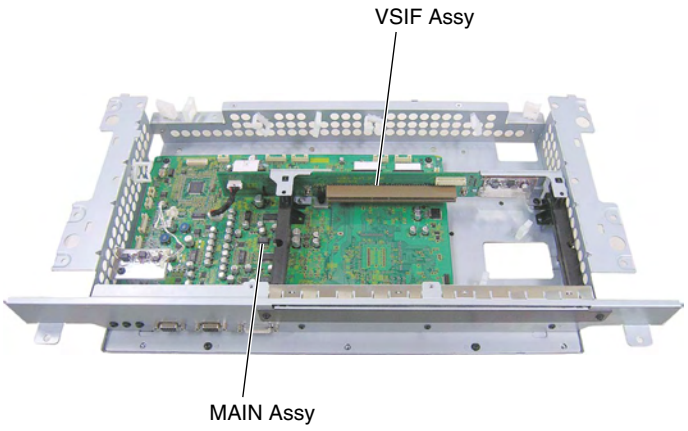


5 Multi Base Block



① Remove the two screws.
② Remove the one screw.
③ Remove the one screw.
④ Disconnect cables, as required.
⑤ Remove the multi base Block.

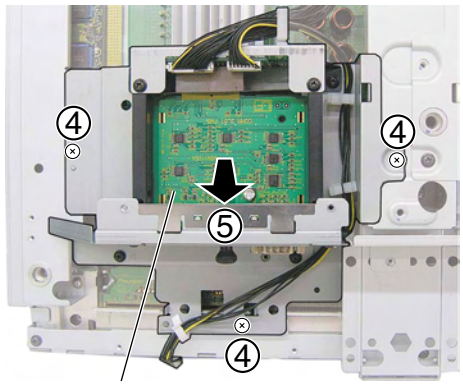




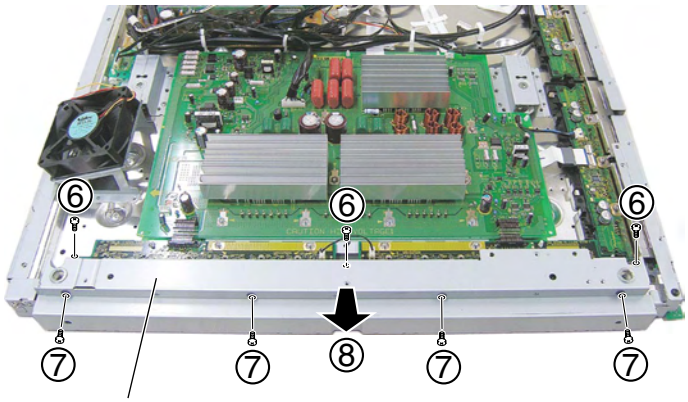
6 Exchange of SCAN IC

① Remove the front case Assy. (See step 1 .)
② Remove the rear case. (See step 2 .)
③ Remove the bottom cover. (See step 3 .)

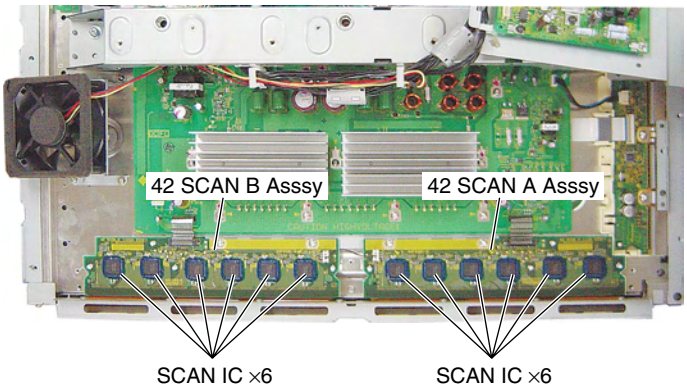
④ Remove the three screws.
⑤ Remove the COMM bracket section.



⑥ Remove the three screws.
⑦ Remove the four screws.
⑧ Remove the front chassis LB.



Exchange



7.2 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

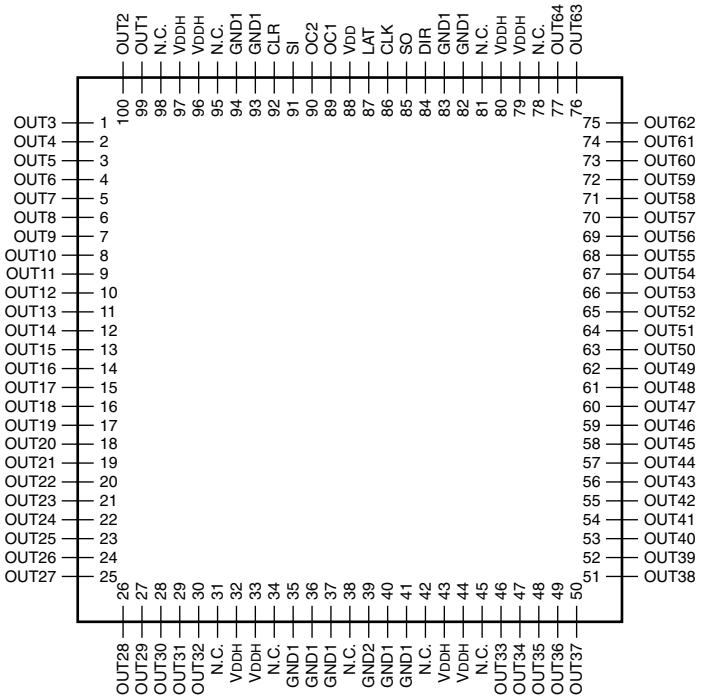
● **List of IC**

SN755870PZT, TC7SH08FUS1, TC74VHC00FTS1, AXF1143, AXF1145, TC74VHC08FTS1, AXF1144, M62334FP, TC74VHC123AFTS1, PST3610UR, PEG122C, DS90CF388

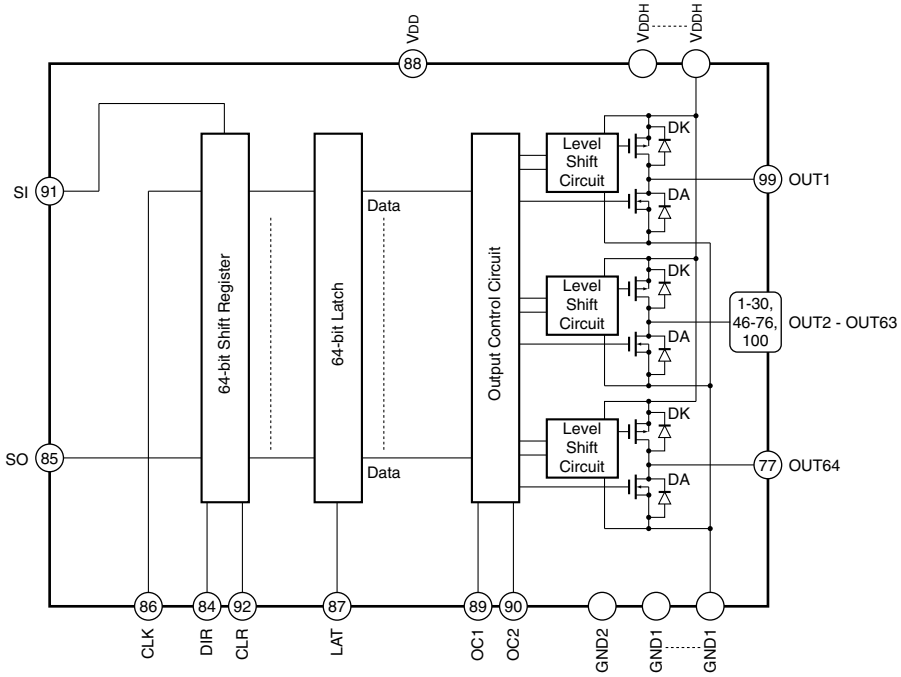
■ SN755870PZT (42 SCAN A ASSY : IC2701 - IC2706) (42 SCAN B ASSY : IC2801 - IC2806)

• Plasma Display Panel IC

● **Pin Arrangement (Top view)**



● **Block Diagram**



● Pin Function

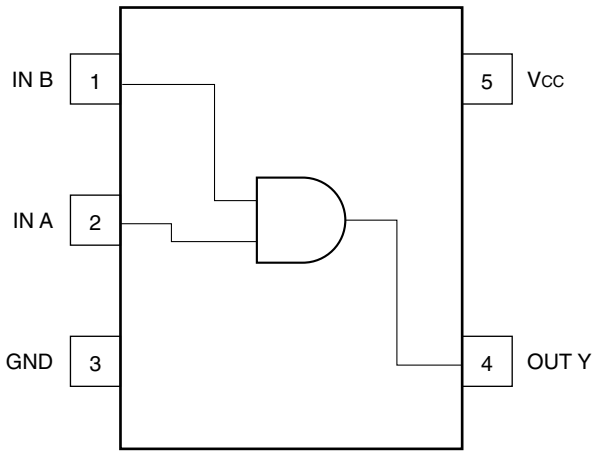
No.	Pin Name	I/O	Pin Function
1 - 30	OUT3 - OUT32	O	High-voltage push-pull output
31	N.C.	–	Not connected
32 - 33	V_{DDH}	–	High-voltage circuit supply
34	N.C.	–	Not connected
35 - 37	GND1	–	Ground
38	N.C.	–	Not connected
39	GND2	–	Ground
40 - 41	GND1	–	Ground
42	N.C.	–	Not connected
43 - 44	V_{DDH}	–	High-voltage circuit supply
45	N.C.	–	Not connected
46 - 77	OUT33 - OUT64	O	High-voltage push-pull output
78	N.C.	–	Not connected
79 - 80	V_{DDH}	–	High-voltage circuit supply
81	N.C.	–	Not connected
82 - 83	GND1	–	Ground
84	DIR	I	Setup of shift register shift direction L = Shift into reverse (SO → SI) H = Shift forward (SI → SO)
85	SO	I/O	Serial data input / output
86	CLK	I	Serial clock input Fetch SI or SO data to shift register by CLK rise edge
87	LAT	I	LAT data input L = Transfer shift register data to output latch H = Hold data to output latch
88	V_{DD}	–	Logic supply
89	OC1	I	Output control Control output according to the right truth value table
90	OC2	I	
91	SI	I/O	Serial data input / output
92	CLR	I	All output reset CLR pin : L → Normal operation CLR pin : H → All output High
93 - 94	GND1	–	Ground
95	N.C.	–	Not connected
96 - 97	V_{DDH}	–	High-voltage circuit supply
98	N.C.	–	Not connected
99 - 100	OUT1 - OUT2	O	High-voltage push-pull output

OC1	OC2	OUT
L	L	ALL Hi-Z
L	H	DATA
H	L	ALL L
H	H	ALL H

■ TC7SH08FUS1 (42 SCAN B ASSY : IC2807)

• 2-input AND Gate

● **Pin Arrangement (Top view) / Block Diagram**



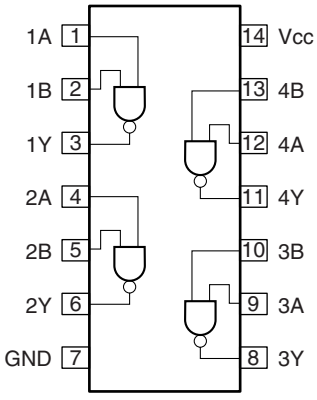
● **Truth Table**

A	B	Y
L	L	L
L	H	L
H	L	L
H	H	H

■ TC74VHC00FTS1 (42 X DRIVE ASSY : IC1002)

• Quad 2-Input NAND Gate

● **Block Diagram**



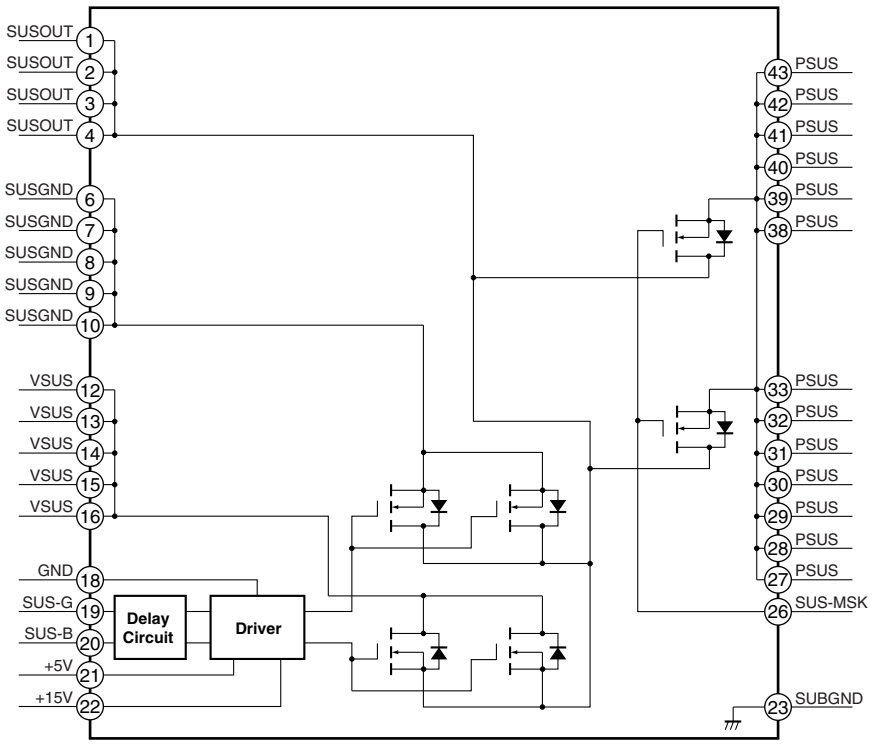
● **Truth Table**

A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

■ AXF1143 (42 X DRIVE ASSY : IC1202)

• X Mask Module

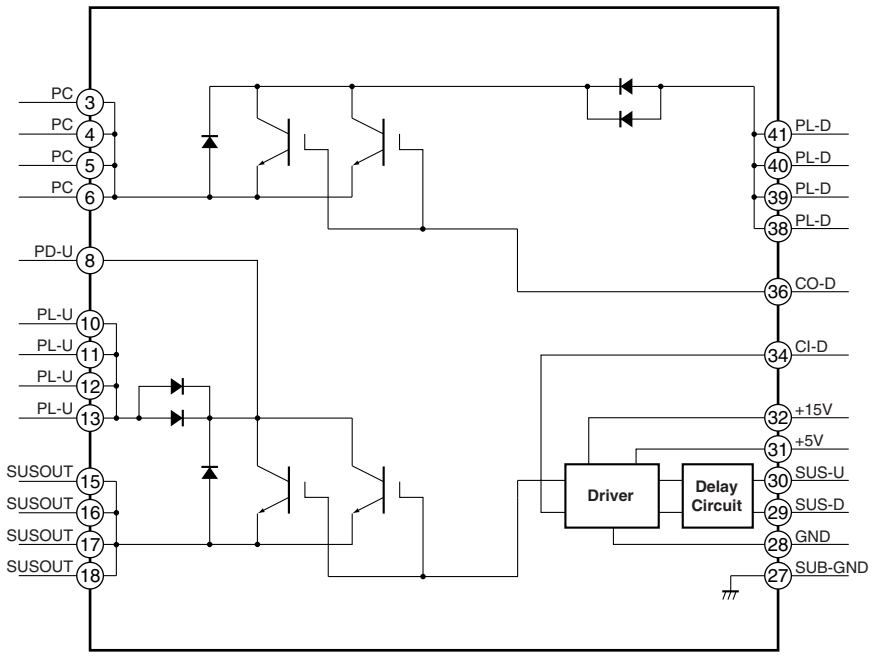
● Block Diagram



■ AXF1145 (42 X DRIVE ASSY : IC1101) (42 Y DRIVE ASSY : IC2101)

• DK Module

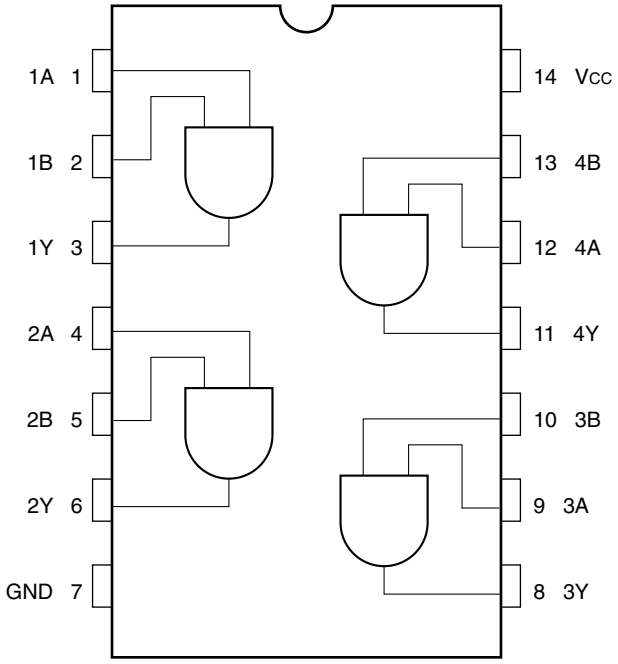
● Block Diagram



■ TC74VHC08FTS1 (42 Y DRIVE ASSY : IC2003, IC2005)

• Quad 2-input AND Gate

● Pin Arrangement (Top view) / Block Diagram



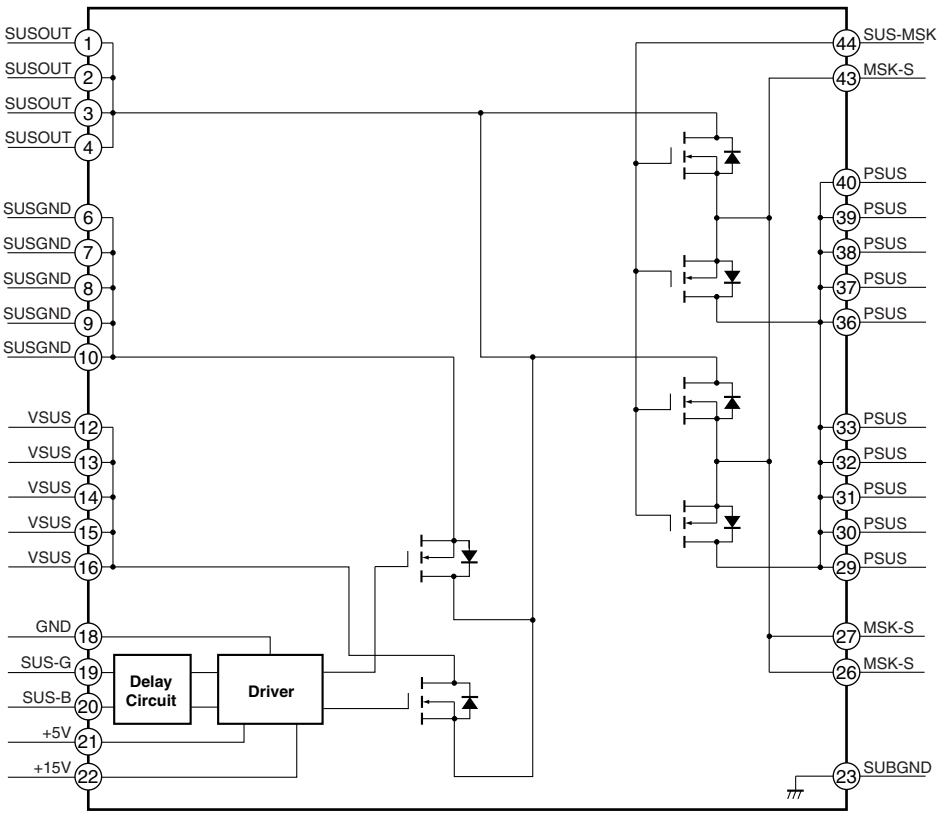
● Truth Table

A	B	Y
L	L	L
L	H	L
H	L	L
H	H	H

■ AXF1144 (42 Y DRIVE ASSY : IC2252, IC2253)

• Y Mask Module

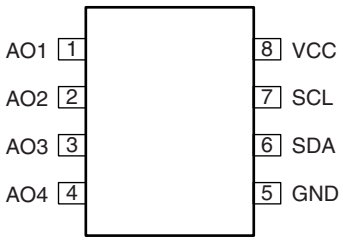
● Block Diagram



■ M62334FP (MD DIGITAL ASSY : IC3157)

• 8-bit 4ch I2C Bus D-A Converter with Buffer Amplifier

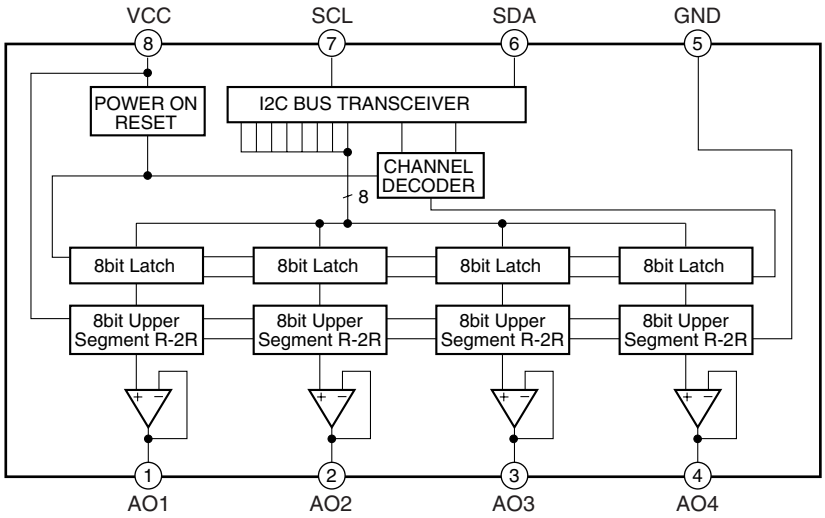
● Pin Arrangement (Top view)



● Pin Function

No.	Pin Name	Pin Function
1	AO1	8-bit resolution D-A converter output
2	AO2	
3	AO3	
4	AO4	
5	GND	Ground
6	SDA	Serial data input
7	SCL	Serial clock input
8	VCC	Power supply

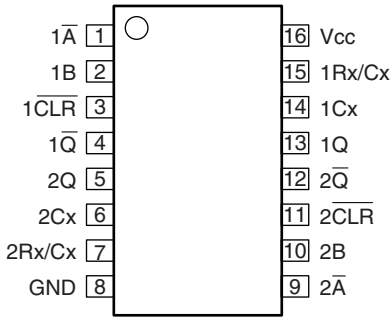
● Block Diagram



■ TC74VHC123AFTS1 (MD DIGITAL ASSY : IC3160)

• Dual Monostable Multivibrator/AFN/AFT Retriggerble

● Pin Arrangement (Top view)



● Truth Table

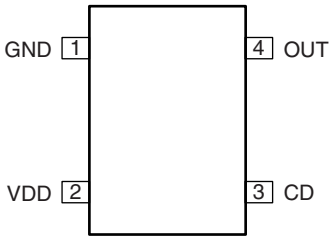
Inputs			Outputs		Note
$\overline{A}$	B	$\overline{CLR}$	Q	$\overline{Q}$	
↓	H	H	⎍	⎍	Output enable
X	L	H	L	H	Inhibit
H	X	H	L	H	Inhibit
L	↑	H	⎍	⎍	Output enable
L	H	↑	⎍	⎍	Output enable
X	X	L	L	H	Reset

X: Don't care

■ PST3610UR (MD DIGITAL ASSY : IC3304)

• Reset IC

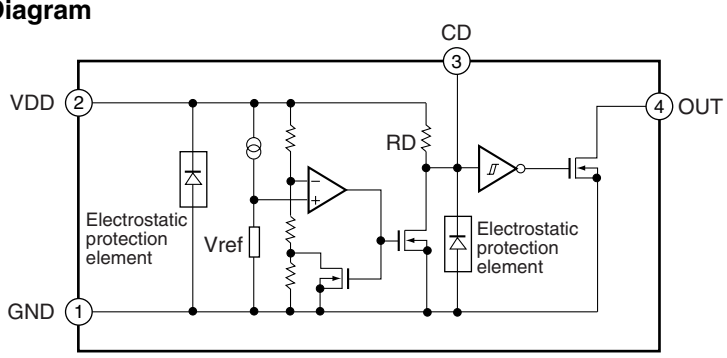
● Pin Arrangement (Top view)



● Pin Function

No.	Pin Name	Pin Function
1	GND	Ground
2	VDD	Power supply / Voltage detection
3	CD	Capacitor connect pin for delay
4	OUT	Reset signal output

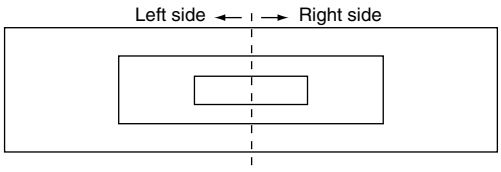
● Block Diagram



■ PEG122C (MD DIGITAL ASSY : IC3401)

• LSI for PDP video processing (SEQUENCE PROCESSOR)

● Pin Arrangement (Top view)



● Left side (Top view)

	1	2	3	4	5	6	7	8	9	10	11	12	13	
A	BAI5	GAI1	GAI4	GAI9	RAI4	RAI9	BBI0	BBI6	GBI1	GBI5	RBI1	RBI7	TRNSEND1	A
B	BAI4	GAI0	GND33	GAI8	RAI3	RAI8	HDI	BBI5	GBI0	GDN33	RBI0	RBI6	TRNSEND0	B
C	BAI3	BAI9	VDD33	GAI7	RAI2	RAI7	VDI	BBI4	BBI9	VDD33	GBI9	RBI5	VDD33	C
D	BAI2	BAI8	GAI3	GAI6	RAI1	RAI6	DEI	BBI3	BBI8	GBI4	GBI8	RBI4	RBI9	D
E	BAI1	BAI7	GAI2	GAI5	RAI0	RAI5	DCLKI	BBI2	BBI7	GBI3	GBI7	RBI3	RBI8	E
F	BAI0	BAI6	PEAK	APLDT	THEATER	GND12	VDD12	BBI1	VDD12	GBI2	GBI6	RBI2	VDD12	F
G	XSCAN20	XSCAN19	XSCAN18	XSCAN17	XSCAN16	VDD12								G
H	XSCAN15	XSCAN14	XSCAN13	XSCAN12	XSCAN11	VDDTC12								H
J	XSCAN10	GND33	VDD33	XSCAN9	GNDTC12	VDD12								J
K	XSCAN8	XSCAN7	XSCAN6	XSCAN5	XSCAN4	VDDTC12								K
L	XSCAN3	XSCAN2	XSCAN1	XSCAN0	GND12	VDD12					GND12	GND12	GND12	L
M	XSUS10	XSUS9	XSUS8	XSUS7	GNDTC12	VDD12					GND12	GND12	GND12	M
N	XSUS6	GND33	VDD33	XSUS5	GND12	VDD12					GND12	GND12	GND12	N
P	XSUS4	XSUS3	XSUS2	XSUS1	XSUS0	VDDTC12					GND12	GND12	GND12	P
R	ADRS0	ADRS1	ADRS2	ADRS3	GNDTC12	VDD12					GND12	GND12	GND12	R
T	TEST_I0	GND33	VDD33	TEST_I1	TEST_I2	TEST_R					GND12	GND12	GND12	T
U	TXOUTM063	TXOUTP063	GNDLA	VDDLA	GNDLA	VDDL12								U
V	TXCLKOUTM06	TXCLKOUTP06	GNDLA	VDDLA	GNDLA	VDDLA								V
W	TXOUTM062	TXOUTP062	GNDLA	VDDLA	GNDLA	VDDLA								W
Y	TXOUTM061	TXOUTP061	GNDLA	VDDLA	GNDLA	VDDL12								Y
AA	TXOUTM060	TXOUTP060	GNDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDL12	VDDLA	VDDLA	VDDL12	VDDLA	VDDLA	AA
AB	TXOUTM073	TXOUTP073	GNDLA	VDDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	VDDBG	REFIN	AB
AC	TXCLKOUTM07	TXCLKOUTP07	GNDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	AC
AD	TXOUTM072	TXOUTP072	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	AD
AE	TXOUTM071	TXOUTP071	GNDLA	TXOUTP033	TXCLKOUTP03	TXOUTP032	TXOUTP031	TXOUTP030	TXOUTP023	TXCLKOUTP02	TXOUTP022	TXOUTP021	TXOUTP020	AE
AF	TXOUTM070	TXOUTP070	GNDLA	TXOUTM033	TXCLKOUTM03	TXOUTM032	TXOUTM031	TXOUTM030	TXOUTM023	TXCLKOUTM02	TXOUTM022	TXOUTM021	TXOUTM020	AF

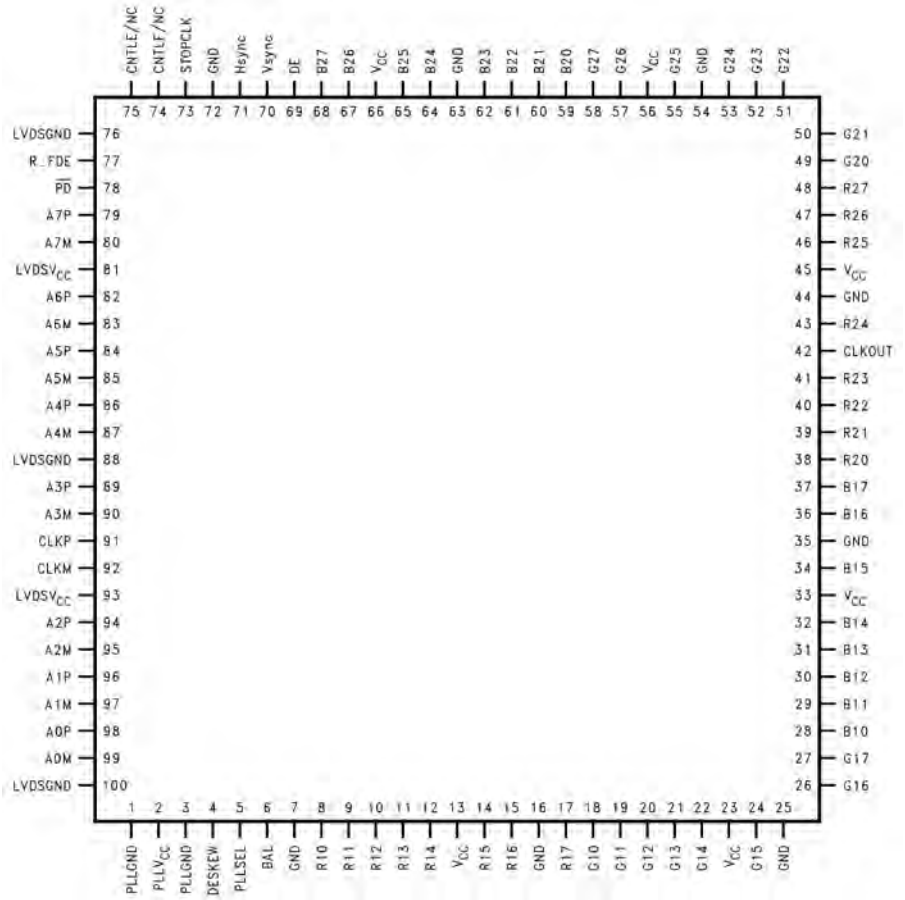
● Right side (Top view)

	14	15	16	17	18	19	20	21	22	23	24	25	26	
A	CLKD	VSSPA	EXDI011	EXDI09	EXA4	EXA10	EXA2	EXA16	EXA20	CSCS_N1	CSCS_N2	CSIOSCK1	CSIORXD	A
B	CSRD_N	VCCPA	EXDI04	GND33	EXA3	EXA9	EXA1	EXA15	EXA19	CSCS_N0	GND33	TCRAM_MONITOR0	TCRAM_MONITOR1	B
C	CLKS	CLK_MONI	EXDI012	VDD33	EXDI00	EXA8	CSWR_N	EXA14	EXA18	UARTRXD	VDD33	TCRAM_MONITOR2	CSIORQ	C
D	VSSPB	EXDI014	EXDI05	EXDI02	EXDI08	EXA7	EXA0	EXA13	EXA17	UARTTXD	CS10TXD	RESETX	SDIJTAG	D
E	VCCPB	EXDI07	EXDI013	EXDI010	EXDI01	EXA6	EXA11	EXA12	CSEXWAIT_N	SDITRST_N	SDITCK	SDIDBI_N	SDITMS	E
F	LPFMONI	EXDI015	EXDI06	EXDI03	VDD12	EXA5	VDD12	GND12	SDITDO	SDITDI	GPI000	GPI001	GPI002	F
G								VDD12	GPI003	GPI004	GPI005	GPI006	GPI007	G
H								VDDTC12	YSCAN20	YSCAN19	YSCAN18	YSCAN17	YSCAN16	H
J								VDD12	GNDTC12	YSCAN15	VDD33	GND33	YSCAN14	J
K								VDDTC12	YSCAN13	YSCAN12	YSCAN11	YSCAN10	YSCAN9	K
L	GND12	GND12	GND12					VDD12	GND12	YSCAN8	YSCAN7	YSCAN6	YSCAN5	L
M	GND12	GND12	GND12					VDD12	GNDTC12	YSCAN4	YSCAN3	YSCAN2	YSCAN1	M
N	GND12	GND12	GND12					VDD12	GND12	YSCAN0	VDD33	GND33	VSUS10	N
P	GND12	GND12	GND12					VDDTC12	YSUS9	YSUS8	YSUS7	YSUS6	VSUS5	P
R	GND12	GND12	GND12					VDD12	GNDTC12	YSUS4	YSUS3	YSUS2	VSUS1	R
T	GND12	GND12	GND12					YSUS0	RSV1	RSV0	VDD33	GND33	AFE_PS_N	T
U								VDDL12	GNDLA	VDDLA	GNDLA	TXOUTP050	TXOUTM050	U
V								VDDLA	GNDLA	VDDLA	GNDLA	TXOUTP051	TXOUTM051	V
W								VDDLA	GNDLA	VDDLA	GNDLA	TXOUTP052	TXOUTM052	W
Y								VDDL12	GNDLA	VDDLA	GNDLA	TXCLKOUTP05	TXCLKOUTM05	Y
AA	VDDLA	VDDLA	VDDL12	VDDLA	VDDLA	VDDL12	VDDLA	VDDLA	VDDLA	VDDLA	GNDLA	TXOUTP053	TXOUTM053	AA
AB	VREF12	GNDBG	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	VDDLA	GNDLA	TXOUTP040	TXOUTM040	AB
AC	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	VDDLA	GNDLA	TXOUTP041	TXOUTM041	AC
AD	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	GNDLA	TXOUTP042	TXOUTM042	AD
AE	TXOUTP013	TXCLKOUTP01	TXOUTP012	TXOUTP011	TXOUTP010	TXOUTP003	TXCLKOUTP00	TXOUTP002	TXOUTP001	TXOUTP000	GNDLA	TXCLKOUTP04	TXCLKOUTM04	AE
AF	TXOUTM013	TXCLKOUTM01	TXOUTM012	TXOUTM011	TXOUTM010	TXOUTM003	TXCLKOUTM00	TXOUTM002	TXOUTM001	TXOUTM000	GNDLA	TXOUTP043	TXOUTM043	AF

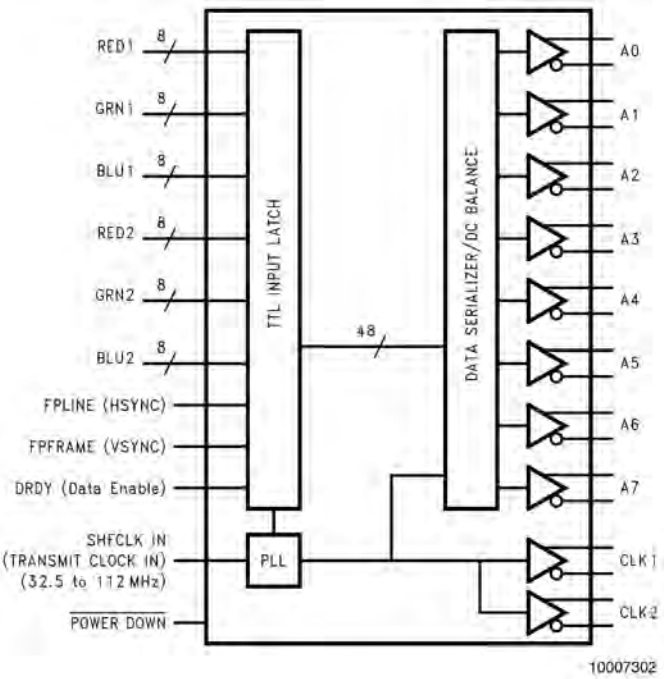
DS90CF388VJD (MD DIGITAL ASSY : IC3001)

• LVDS Receiver

● Pin Layout



● Block Diagram



● Pin Function

No.	Pin Name	I/O	Description
*A	AnP	I	Positive LVDS differential data inputs.
*B	AnM	I	Negative LVDS differential data inputs.
*C	Rn,Gn,Bn,	O	TTL level data outputs. This includes: 16 Red, 16 Green, 16 Blue, and 3 control lines – HSYNC (LP), VSYNC (FLM), DE (Data Enable).
69/71/70	DE,HSYNC, VSYNC		
91	RxCLK INP	I	Positive LVDS differential clock input.
92	RxCLK INM	I	Negative LVDS differential clock input.
42	RxCLK OUT	O	TTL level clock output. The falling edge acts as data strobe.
77	R_FDE	I	Programmable control (DE) strobe select. Tied high for data active when DE is high.
5	PLLSEL	I	PLL range select. This pin must be tied to V_{CC} for auto-range. NC or tied to Ground is reserved for future use. Typical shift point is between 55 and 68 MHz.
6	BAL	I	Mode select for DC Balanced (new) or non-DC Balanced (backward compatible) interface. BAL = LOW fornon-DC Balanced mode. BAL = HIGH for DC Balanced Mode (Auto-detect mode), with this pin HIGH the received LVDS clock signal is used to determine if the interface is in new or backward compatible mode (Notes 1) .
4	DESKEW	I	Deskew and oversampling “on/off“ select. Deskew is active when in put is high. Only supported in DC Balance mode (BAL = High). To complete the deskew operation, a minimum of four clock cycles is required during blanking time.
78	$\overline{PD}$	I	TTL level in put. When asserted (low input) the receiver data outputs are low and clock out put is high.
73	STOPCLK	O	Indicates receiver clock in put signal is not present with a logic high. With a clock input present, alow logic is indicated.
*D	V_{CC}	I	Power supply pins for TTL outputs and digital circuitry.
*E	GND	I	Ground pins for TTL outputs and digital circuitry
2	$PLLV_{CC}$	I	Power supply for PLL circuitry.
1, 3	PLLGND	I	Ground pin for PLL circuitry.
81, 93	$LVDSV_{CC}$	I	Power supply pin for LVDS inputs.
76, 88, 100	LVDSGND	I	Ground pins for LVDS in puts.
75	CNTLE,	O	TTL level data outputs. User-defined control signals - no connect when not used.
74	CNTLF		

Note 1 : The DS90CF388 is designed to automatically detect the DC Balance or non-DC Balance transmitted data from the DS90C387 and deserialize the LVDS data according to the defined bit mapping.

[Pin No.]

*A : 79, 82, 84, 86, 89, 94, 96, 98

*B : 80, 83, 85, 87, 90, 95, 97, 99

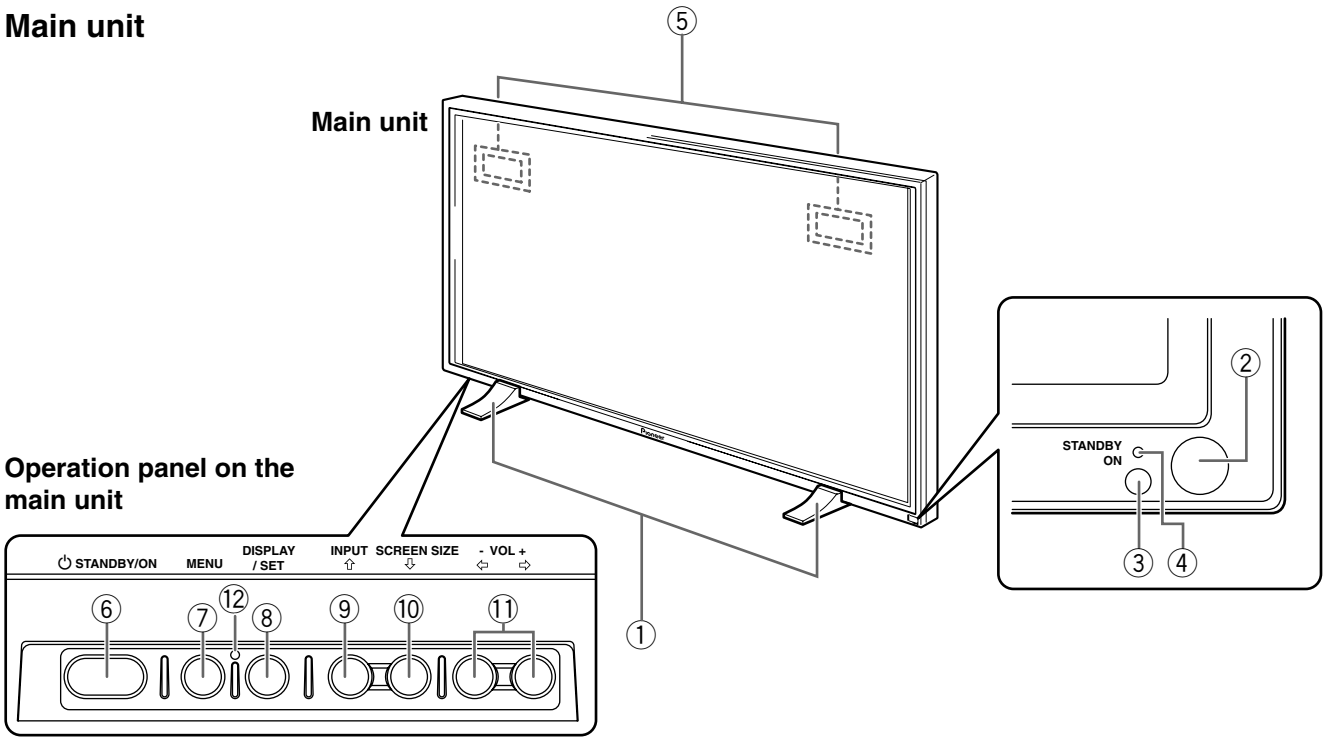
*C : 8–12, 14, 15, 17–22, 24, 26–32, 34, 36–41, 43, 46–53, 55, 57–62, 64, 65, 67, 68

*D : 13, 23, 33, 45, 56, 66

*E : 7, 16, 25, 35, 44, 54, 63, 72

8. PANEL FACILITIES

Main unit



Main unit

① **Display stand**

② **Remote control sensor**
Point the remote control toward the remote sensor to operate the unit .

③ **Ambient light sensor**
This sensor measures the level of light inside the viewing room; it is enabled when the [ENERGY SAVE] option is set to [AUTO] .

④ **STANDBY/ON indicator**
When the unit is operating:
The indicator lights green.
When flashing, the indicator is used to indicate error messages .
The indicator flashes green once every one second when the [POWER MGT.] function is operating.

When the unit is in standby mode:
The indicator lights red .
When flashing, the indicator is used to indicate error messages .

⑤ **Handles**

Operation panel on the main unit

⑥ **STANDBY/ON button (⏻)**
Press to put the display in operation or standby mode.

⑦ **MENU button**
Press to open and close the on-screen menu.

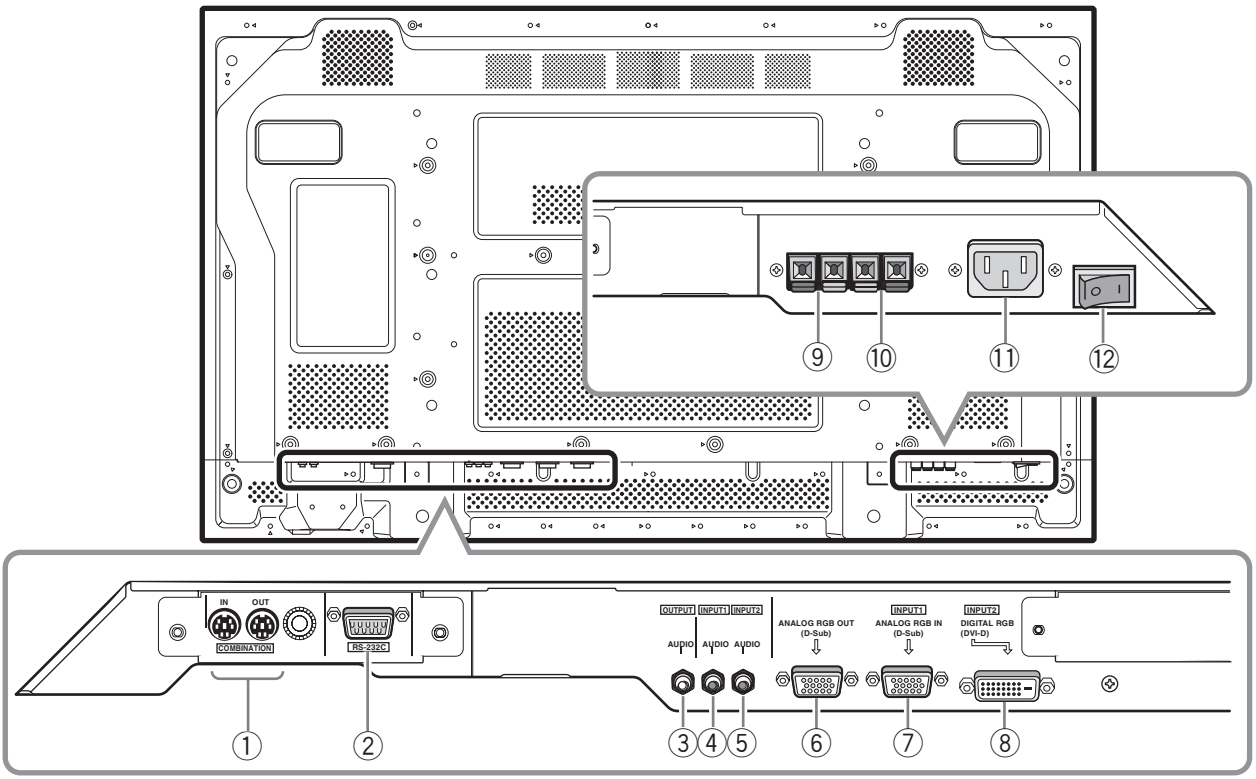
⑧ **DISPLAY/SET button**
Use to confirm onscreen menu selections, and to change settings.
When not indicated by onscreen menus, used to display the current set status.

⑨ **INPUT (⇧) button**
Except when menu screen is displayed, this button operates to change the input.

⑩ **SCREEN SIZE (⇩) button**
Except when menu screen is displayed, this button operates to change the screen size.

⑪ **VOL +/– (⇦/⇨) buttons**
When not indicated for use in onscreen menu items, these buttons are used for adjusting the sound volume.

⑫ **KEY LOCK button**
Lock is cancelled when the key lock button is pressed for 5 seconds.



③ **AUDIO (OUTPUT) (Stereo mini jack)**
Use to output the audio of the selected source component connected to this unit to an A V amplifier or similar component.
Note: No sound is produced from the AUDIO (OUTPUT) jack when the MAIN POWER switch is set to OFF or ON (standby).

④ **AUDIO (INPUT1) (Stereo mini jack)**
Use to obtain sound when INPUT1 is selected. Connect the audio output jack of components connected to INPUT1 to this unit.

⑤ **AUDIO (INPUT2) (Stereo mini jack)**
Use to obtain sound when INPUT2 is selected. Connect the audio output jack of components connected to INPUT2 to this unit.

⑥ **ANALOG RGB OUT (INPUT1) (mini D-sub 15 pin)**
Use the ANALOG RGB OUT (INPUT1) terminal to output the video signal to an external monitor or other component.
Note: The video signal will not be output from the ANALOG RGB OUT (INPUT1) terminal when the main power of this unit is off or in standby mode.

⑦ **ANALOG RGB IN (INPUT1) (mini D-sub 15 pin)**
For connection of a personal computer (PC) or similar component. Make sure that the connection made corresponds to the format of the signal output from the connected component.

⑧ **DIGITAL RGB (INPUT2) (DVI-D jack)**
Use to connect a computer.
Note: This unit does not support the display of copyguard-protected video signals.

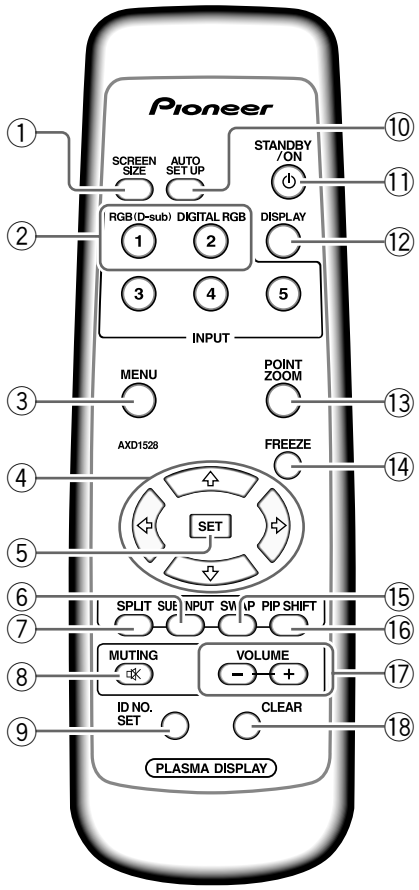
⑨ **SPEAKER (R) terminal**
For connection of an external right speaker. Connect a speaker that has an impedance of 6Ω.

⑩ **SPEAKER (L) terminal**
For connection of an external left speaker. Connect a speaker that has an impedance of 6 Ω.

⑪ **AC IN**
Use to connect the supplied power cord to an AC outlet.

⑫ **MAIN POWER switch**
Use to switch the main power of the unit on and off.

Remote control unit



When handling the remote control unit

- Do not drop the remote control unit or expose it to moisture.
- Do not use the remote control unit in a location subject to direct sunlight, heat radiation from a heater, or in a place subject to excessive humidity .
- When the remote control unit 's batteries begin to wear out, the operable distance will gradually become shorter. When this occurs, replace all batteries with new ones as soon as possible.

① **SCREEN SIZE button**
Press to select the screen size.

② **INPUT buttons**
Press to select the input.

③ **MENU button**
Press to open and close the on-screen menu.

④ **ADJUST (▲/▼/◄/►) buttons**
Use to navigate menu screens and to adjust various settings on the unit.

⑤ **SET button**
Press to adjust or enter various settings on the unit.

⑥ **SUB INPUT button**
During multi-screen display, use this button to change inputs to subscreens.

⑦ **SPLIT button**
Press to switch to multi-screen display.

⑧ **MUTING button**
Press to mute the volume.

⑨ **ID NO. SET button**
Button used by professional installers.

⑩ **AUTO SET UP button**
When using computer signal input, automatically sets the [POSITION], [CLOCK] and [PHASE] to optimum values.

⑪ **STANDBY/ON button (⏻)**
Press to put the unit in operation or standby mode.

⑫ **DISPLAY button**
Press to view the unit 's current input and setup mode.

⑬ **POINT ZOOM button**
Use to select and enlarge one part of the screen.

⑭ **FREEZE button**
When memo screen function is enabled, a still image is displayed in the subscreen.

⑮ **SWAP button**
During multi-screen display, use this button to switch between main screen and subscreen.

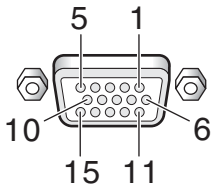
⑯ **PIP SHIFT button**
When using the picture-in-picture mode with multi-screen display, use this button to move the position of subscreen.

⑰ **VOLUME (+/ –) buttons**
Use to adjust the volume.

⑱ **CLEAR button**
Button used by professional installers.

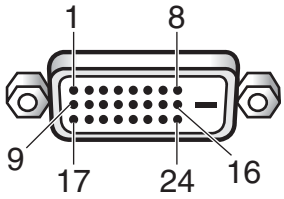
INPUT1/2 pin assignments

INPUT1 (Mini D-sub 15 pin female connector) pin allocation.



Pin No.	Input	Output
1	R	←
2	G	←
3	B	←
4	NC (No connection)	←
5	GND	←
6	GND	←
7	GND	←
8	GND	←
9	DDC + 5V	NC (No connection)
10	GND	←
11	NC (No connection)	←
12	DDC SDA	NC (No connection)
13	HD or H/V SYNC	←
14	VD	←
15	DDC SCL	NC (No connection)

INPUT2 (DVI female connector) pin allocation.



Pin No.	Signal Assignment
1	T.M.D.S. Data2–
2	T.M.D.S. Data2+
3	T.M.D.S. Data2/4 Shield
4	NC (No connection)
5	NC (No connection)
6	DDC Clock
7	DDC Data
8	NC (No connection)
9	T.M.D.S. Data1–
10	T.M.D.S. Data1+
11	T.M.D.S. Data1/3 Shield
12	NC (No connection)
13	NC (No connection)
14	+5V Power
15	GND
16	Hot Plug Detect
17	T.M.D.S. Data0 –
18	T.M.D.S. Data0 +
19	T.M.D.S. Data0/5 Shield
20	NC (No connection)
21	NC (No connection)
22	T.M.D.S. Clock Shield
23	T.M.D.S. Clock+
24	T.M.D.S. Clock–

■ Jigs list

Jig No.	Name	Remarks
GGD1469	Extension cable for 42inch PDP diagnosis	
GGP1075	Extension cable for 42inch PDP diagnosis	

Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

Position to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008